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U. S. Supreme Court

DECISIONS

ON THE LAW OF

PATENTS FOR INVENTIONS

RENDERED BY

ENGLISH COURTS

*SINCE THE BEGINNING OF THE
SEVENTEENTH CENTURY.*

VOL. III.

1839 - FEB., 1843.

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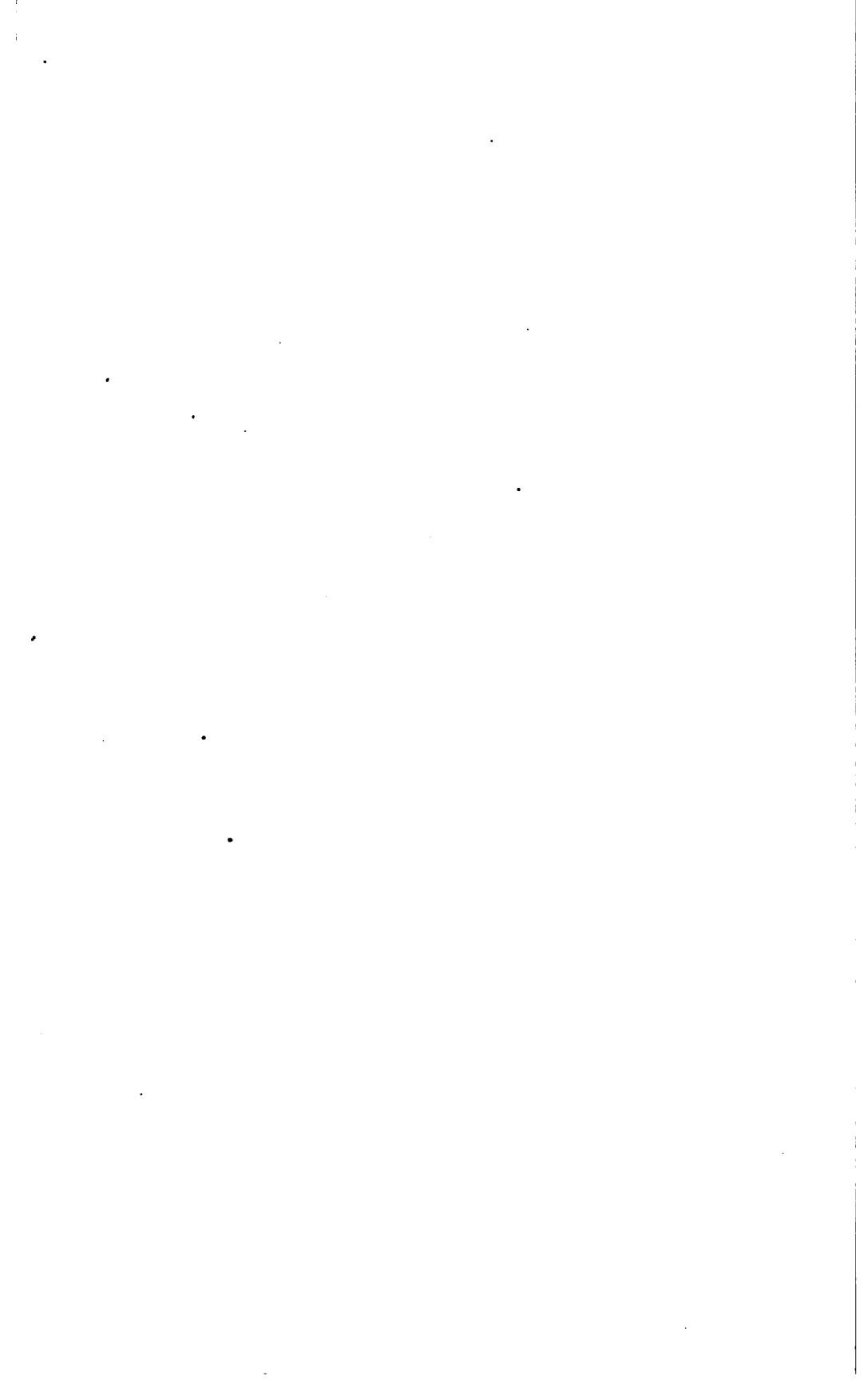
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CURTIS v. CUTTS.

Chancery, Jan. 19, 1839.

(8 L. J., N. S., Ch. 184.)

Granting Injunction. Retaining Bill with Leave to bring Action.

Where a bill is filed to restrain the infringement, by the defendant, of letters patent, a sufficient cause to justify the injunction must be stated by the plaintiff on the face of the bill, and he must not depend solely on the admissions contained in the defendant's answer for the granting or continuing of the injunction.

If the answer deny that the invention is new, and also that there has been exclusive enjoyment under the letters patent, and state that the specification is imperfectly set forth in the bill, which is the fact, that will dissolve an injunction previously obtained on affidavit, giving the plaintiff liberty to bring an action, although the defendant admits by his answer that he has made machines upon the principle comprised in the letters patent.

The possession and enjoyment, to entitle a party to an injunction until an action can be tried at law, must have been undisturbed and exclusive.

Appeal from a decision of the Vice-Chancellor refusing to dissolve an injunction.

The bill, which was filed by Messrs. Curtis and Parr, in June, 1838, stated (among other things) that in the year 1813 Joseph Cheesborough Dyer, a manufacturer of cards for carding wool and similar fibrous materials, discovered and invented improvements in the machinery used in that trade; that he took out a patent for them, dated December 15, 1814, and another, for further improvements, dated December 9, 1825, the substance of which patents and of their specifications was stated in the bill, which patents in par-

ticular covered machinery for making wire cards of the kinds known as "fillet" cards and "sheet cards," and for preparing leather to be used in making cards. That in January, 1836, Dyer retired from business as a manufacturer, selling his lease, machinery, tools, good-will, etc., to the plaintiffs, who became assignees of the patent of 1825. That the plaintiffs had recently discovered that the defendants had constructed divers machines for making fillet cards upon the principle of the further improvements for which the letters patent of December 9, 1825, had been granted, and had sold and disposed of some such machines, and had others in his possession, which he intended to sell without the plaintiff's license, which the bill alleged was an infringement of the letters patent of December 9, 1825. The prayer of the bill was that the defendant might be restrained from making and selling the improved machines for which the letters patent of December 9, 1825, were granted, and might account for the improved machines which he had sold and delivered up for the plaintiffs such as were in his possession.

The defendant by his answer denied the invention of the further improvements by Dyer, and stated that the specification of the letters patent of December 9, 1825, which had been enrolled, was imperfect and fraudulent; that Dyer did not discover or invent the new improvements; and that the defendant had not pirated or infringed the alleged inventions; that the further improvements and inventions were not new or original; and that Dyer was not the first and sole inventor of the further improvements and inventions; that the substance of the alleged improvements consisted of the substitution of an indented wheel or cam for a pack or notched bar of iron, and was by no means an improvement, but only a colorable alteration in the mode of producing the same result as by the old machinery, and introduced merely for the purpose of fraudulently continuing the existence of the letters patent, then about to expire; that for some months previous to the taking out the said letters patent of December 9, 1825, machines constructed on the principles for which the said letters patent were so

taken out were used and worked for making fillet cards by Dyer himself ; and that in 1810 machines upon the principle of the horizontal plate, and similar to those constructed by the defendant for a person named Walton, had been and then were in use in or near London, and that a patent was taken out in respect of the same at or about that time, which letters patent had expired ; that in 1835 the plaintiff Parr informed the defendant, who was then in his employ, that the letters patent of 1825 were invalid and not worth a straw ; that no such machine as was actually at work as a wire card-making machine, upon the principle professed to be explained, could be made by or from the description contained in the enrolled specification. The answer, however, admitted that the defendant had made and sold card fillet machines similar in substance to the further improved card fillet machines made by the plaintiffs.

An injunction, *ex parte*, on affidavit, was granted by the Vice-Chancellor in July, 1838, which his Honor declined to dissolve on the coming in of the answer ; and the defendant now appealed from that decision.

Rolfe, Solicitor-General, and *Elmsley*, in support of the appeal, contended that the bill did not sufficiently state the nature of the alleged infringements of the letters patent, or specify the improved machines ; that it was not incumbent on the defendant to point out what the infringement was ; that the plaintiffs, not having made out a sufficient case by their bill and affidavits, could not sustain the injunction by evidence to be collected from admissions contained in the defendant's answer ; and they cited *Hill v. Thompson*, 1 *ante*, 285 ; *Bramwell v. Halcomb*, 3 *Myl. & C.* 737 ; *Kay v. Marshall*, 2 *ante*, p. 185.

Wigram and *Bichner*, contra, contended that the long possession of the letters patent, for nearly fourteen years, by Dyer and the plaintiffs was a sufficient reason for the injunction being continued ; and that the infringement of the letters patent being admitted by the answer, there was no issue except as to the validity of the letters patent ; and that that was an additional reason for not dissolving the injunction.

Lord Chancellor COTTENHAM. The bill does not state such a case as to justify the granting of an injunction ; but the answer does state that which, if stated in the bill, would have entitled the plaintiffs to an injunction as regards their title. There are, however, other statements contained in the answer which throw doubt on the right of the plaintiffs to the injunction prayed by them ; the answer disputes the validity of the letters patent, and states that the alleged invention is not new, and that the specification is imperfect ; on the other hand, the plaintiffs contend that there has been a long possession and enjoyment under the letters patent of 1825. This court gives credit, no doubt, to long enjoyment under letters patent, until it is proved that they are bad ; but then there must be not only enjoyment, but exclusive enjoyment under them (*Hill v. Thompson*, 1 *ante*, pp. 285, 299). The question is whether in this answer such a case is admitted. The answer states that the plaintiff Parr, when not interested in the letters patent, had made an engine or machine upon the principle claimed by the letters patent, and insists that the letters patent are not new ; the defendant shows that the exercise by the plaintiff Parr, when not interested in the letters patent, of the right to make the machines, and by the defendant since, is inconsistent with the exclusive right of the plaintiffs, and not only negatives exclusive enjoyment by Dyer and the plaintiffs, but shows that the title of the plaintiffs was disputed by the very party who now sets up the exclusive enjoyment. If the difficulty had been only the generality of statement in the bill, I should have supported the letters patent ; but the allegations in the answer negative the exclusive enjoyment claimed by the plaintiffs. I think the right course is not to restrain the defendant, but to give the plaintiffs the opportunity of trying the question at law ; and they can make another application to the court on a different case if they choose ; for there is no doubt, from the admissions in the answer, that the defendant has made machines upon the principle comprised in the letters patent. The injunction must be dissolved, with liberty for the plaintiffs to bring an action. The order of the Vice-Chancellor

should be discharged, and the costs of the proceedings before his Honor, as also the present costs, must be costs in the cause.

Injunction dissolved.

*Re ROBERTS'S PATENT.***Privy Council, Feb. 22, 1839.**

(1 Web. P. C. 573.)

Grounds for Extension. Computation of Profits.

The violent opposition to the introduction of a meritorious invention, which has prevented the patentee from realizing a profit, is a ground for granting an extension of the term of the patent.

A patentee is entitled to deduct the expenses of taking and defending a patent, and the value of his time devoted to the invention, in estimating the profits derived from the patent.

Petition for an extension.

This was an application by the patentee for an extension of several letters patent granted to Richard Roberts for "an improvement or certain improvements of, in, or applicable to, the mule, billy, jenny, stretching-frame, or any other machine or machines, however designated or named, used in spinning cotton, wool or other fibrous substances, and in which either the spindles recede from or approach to the rollers or other deliverers of the said fibrous substances, or in which such rollers or other deliverers recede from or approach to the spindles." The letters patent for England were dated March 29, 1825; for Scotland, April 5, 1825; and for Ireland, October 1, 1825. The patent for England was numbered 5,138.

The petition described the dependence of the spinning, before the invention of the self-acting mules, on the head spinner, and the interruptions and inconveniences to which the masters were subjected by combinations among the head spinners. That the petitioner had been repeatedly and

earnestly solicited to turn his attention to the invention of a machine whereby all the motions and operations of the mule might be completed without manual labor ; and after a year of incessant labor a machine was constructed and put to work early in 1825. That in July, 1825, the success of the invention being then known, the premises were destroyed by a fire, believed to have been the act of an incendiary ; that a loss of above £10,000 beyond the insurance was sustained, and the same office refused to insure the premises when restored. That from 1826 to 1831 the business of spinning was carried on without any disputes between the masters and head spinners, and few machines were ordered ; but in 1831 an extensive combination being formed among the head spinners, many machines were ordered. That the success of the invention led to many piracies, which interfered greatly with the orders for the invention while legal proceedings for stopping such infringements were pending ; that during the last few years orders were delayed in expectation of the invention being open to the public. The petition, after setting forth the various interruptions which had been occasioned in the enjoyment of the invention by the petitioner and his partner, and the amount of receipts and expenditure, stated that the profits on the whole did not exceed £7,000, a sum considerably less than the loss sustained by reason of the fire and the average profits on the capital employed in business.

Pollock having opened the case on the part of the petitioner—

Campbell, Attorney-General, stated that, the facts being made out to their lordships' satisfaction, he saw no objection on the part of the public to the prayer of the petition being granted.

B. Fothergill, manager of the works of Sharp & Roberts. Formerly the head spinner had to regulate the tension of the yarn by pressing his hand upon it, and also to move the carriage toward the rollers and to regulate by his hand the form of the cop ; the consequence was, that if he did not by one hand regulate the uniform motion of the machine to what was required for the full tension of the yarn, he would

either break it or leave what are called "snarls" in the yarn, so that it required considerable tact to perform the operation correctly. The machine performs the operations perfectly ; the yarn is decidedly superior to that produced by the old process ; it is more uniform in the twist and less waste is made. About 600,000 spindles have been sold. The fire broke out on a Sunday afternoon in several unconnected parts of the premises. The crowd used violent language against the machine. There were marks on a wall of persons having been on the premises. The loss was about £13,000 ; one office refused to insure again.

D. Cheetham, a cotton-spinner. We have used 230,000 spindles on the self-acting mules ; they answer perfectly well ; the first outlay is recovered in from two to three years ; they will last from fifteen to twenty years, or as long as the average of machinery. There was a great prejudice against them at first, and we have had mischief at one of our manufactories in consequence of our own managers being opposed to them. The men were jealous of them ; we find this occur in all cases. The self-acting machines are more accurate than hands, and there is less loss of yarn. In 1824 I applied with other cotton-spinners to Mr. Roberts, requesting him to make a machine which should supersede manual labor.

W. H. Forster, book-keeper to Messrs. Sharp & Roberts. I produce a statement from the books of the expenditure and receipts in connection with the patents. The expenditure includes remuneration to Mr. Roberts and his partners, according to the time which they respectively devoted to the invention ; the payments to pattern-makers, wages and cost of materials, from the commencement of Mr. Roberts's experiments to December 31, 1838 ; the cost of the letters patent and specifications, law and travelling expenses, and interest at five per cent. every year on the capital employed up to the end of the preceding year. The receipts include the actual returns, interest at five per cent. on the receipts being added yearly. The account shows £35,988 on one side and £29,044 on the other, leaving a profit of £6,944 ; against which is a loss of £10,154, above the in-

surance, from the fire, according to the accompanying statement.

Lord BROUGHAM. The actual expenses should be taken, but deducting the value of Mr. Roberts's time, the expenses of taking and defending the patents ; if the interest is taken off on one side it must also be taken off the other.

Pollock. The receipts during the last three or four years have been £5,000 a year ; that is a fair test of what the inventor ought to have received during the whole fourteen years. During the first seven years he got nothing, and was under a great outlay. The invention is so useful that, though it has had to struggle with the prejudices of the men and the fears of the masters, £5,000 a year has been received during the last three years.

Bower, solicitor to the petitioner. I produce the papers containing the advertisements, the letters patent and the specification. No caveat has been entered at any time.

The LORD PRESIDENT. [Lord LYNDHURST, Lord BROUGHAM and Sir H. JENNER also sat.] It is the opinion of the committee that this patent should be prolonged for the term of seven years, as prayed, partly in consequence of the ingenuity of the invention and partly in consequence of the peculiar character of the resistance which has been opposed to it.

Report accordingly.

Re WRIGHT'S PATENT.

Privy Council, Feb. 28, 1839.

(1 Web. P. C. 575.)

Extension of Term. User.

The fact of the invention not having been brought into use, unless explained, is an objection to the extension of the term.

Being explained by the pecuniary difficulties and embarrassments of the patentee, extension recommended.

Petition for extension.

This was an application on the part of the patentee for the extension of the term of letters patent granted to him April 20, 1825, numbered 5,154, for "improvements in machinery or apparatus for washing, cleansing or bleaching of linens, cottons and other fabrics, goods or fibrous substances."

Several witnesses were called, who spoke of the great utility of the invention, and who attributed the want of introduction of the invention to the embarrassments of the patentee. That the invention had never had a fair chance of success, owing partly to the engagements the patentee was under, to complete a previous invention for making pins by machinery. It was shown that the invention had been used with success by several bleachers.

Campbell, Attorney-General, on behalf of the Crown, stated that he knew of no objection to the prayer of the petition, except that the invention did not appear to have been brought into extensive use.

The LORD PRESIDENT. The committee, looking at the merits of this invention, are disposed to recommend the extension of the patent for the term of seven years, considering that the circumstance of its not having been brought more extensively into use is explained by the evidence.

Report accordingly.

Re KOLLMAN'S PATENT.

Privy Council, Feb., 1839.

(1 Web. P. C. 564.)

Grounds for Extension.

The invention being meritorious, but from circumstances beyond the control of the patentee not having been sufficiently appreciated and not productive of reward, an extension was recommended.

Application for an extension.

The patent in question had been granted to G. A. Kollman for "improvements in the mechanism and general con-

struction of piano-fortes." The invention was described to consist, 1. In striking down toward the bridge and sounding-board, instead of away from the bridge and sounding-board, as in the old piano ; the effect of which was to improve the tone in purity, power and fulness ; 2. In the frame-work for fixing of the pegs to which the wires are attached ; the arrangements admitting of the use of strong wires, and of adjusting their tension with great accuracy, and effectually maintaining the wire in a state of tension, notwithstanding the motion of the instrument. The tension necessarily put upon the wires deranges the pianos on the old construction very quickly ; they also become out of tune by moving or with change of temperature. An instrument made according to Mr. Kollman's invention could be carried to two or three concerts in succession and would not require tuning, whereas an instrument on the old construction must be tuned after each concert. The number of pianos sold by Mr. Kollman was twenty-three, and hitherto he had been a great loser by his invention.

Campbell, Attorney-General, having cross-examined the witnesses as to the nature and novelty of the invention, stated that he did not feel himself called upon, on the part of the public, to oppose the prayer of the petition. The invention appeared to be a meritorious one, though from circumstances beyond the control of the patentee its merits had not been sufficiently appreciated.

Lord LYNDHURST. [Lord BROUGHAM, BOSANQUET and VAUGHAN, JJ., and Dr. LUSHINGTON also sat.] We think this a case for an extension for seven years.

Report accordingly.

BICKFORD v. SKEWES.

Chancery, March 8, 1839.

(2 Carp. P. C. 454.)

Injunction. Delay in Moving to dissolve.

When the court has interfered, in aid of a legal right, by granting an injunction upon the terms of the plaintiff's bringing an action, it will deprive the plaintiff of the injunction if he does not commence and proceed with his action with due promptness ; but it will not do this if the defendant has been supine in the cause.

Appeal from an order.

In this case an injunction had been granted to restrain the defendant from manufacturing fuses, made according to the plaintiff's patent, granted in 1831. The bill was filed in August, 1837. A motion was made by the defendant in December, 1838, to dissolve the injunction, and to make an order that the plaintiffs should proceed to trial at law at the assizes about to be held in the county of Devon. These applications were refused, and the Lord Chancellor simply directed that the plaintiffs should proceed to establish their right at law. From this order the defendants appealed.

It was contended on behalf of the defendant that the order should have directed the earliest opportunity of proving at law the plaintiffs' right to the patent, and that the court ought not to protect the plaintiffs by injunction unless they proceeded at law in such manner as to bring on the trial at Devon the coming assizes. If the court left the plaintiffs to take their own course and time, then the injunction ought to be dissolved.

On the part of the plaintiffs it was urged that all due diligence had been and would be used to bring on the trial. Up to the present time all the delay had been on the part of defendant.

Lord Chancellor COTTONHAM. In matters of this kind an injunction is granted or refused by the court, as the case

may be, until the right has been established at law. I cannot acquiesce in the statement at the bar that the court gives up all protection to the plaintiff when an action has been directed to be brought by him to prove his right, although it might have been reasonable when the defendant was restrained from infringing the patent, to compel the plaintiff to proceed as quickly as possible to try his right at law ; yet the court ought not to place the plaintiff at risk and inconvenience if the defendant has conducted himself in such a manner as to have caused the pressure that is complained of. I find that, although the bill was filed and the injunction obtained in the month of August, 1837, no application is made by the defendant to dissolve the injunction till December, 1838. The plaintiff had the possession and enjoyment of his patent for a period of six years before the filing of his bill, and the defendant acquiesces in the injunction granted for a further period of sixteen months ; and if the defendant had not been guilty of delay, the plaintiff might have had reasonable time to prepare himself for the trial of the action. The case must be dealt with according to the admitted dates. On this day, March, 8, 1839, I am asked to compel the plaintiffs to proceed to trial in this case on the 18th instant, in Devonshire, after the great delay of the defendant in not making his application to the Vice-Chancellor earlier than the 4th of the present month. I do not consider the application reasonable under the circumstances of the case, and shall refuse the motion ; and as I do not find any opinion was expressed by the Vice-Chancellor to the effect that the defendant could not come to the court in case any delay should arise on the part of the plaintiffs, but that he must apply to the judges in the common law courts, I refuse the motion with costs.

Motion refused.



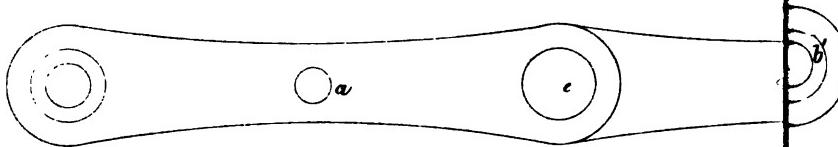
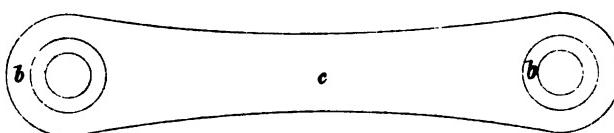
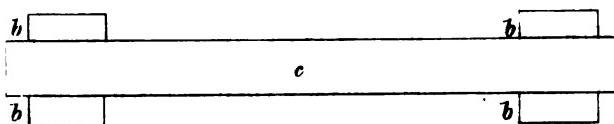
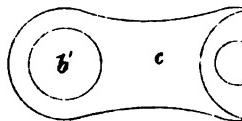
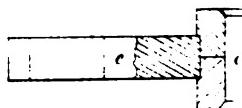
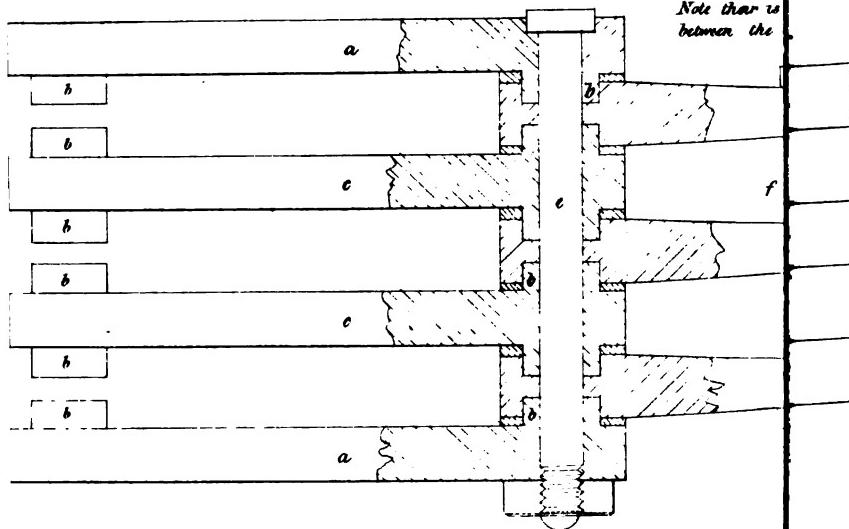


FIG. 4.

FIG. 3.



The enrolled drawing is colored

A.D. 1839 N° 7999.

Chains for Bridges, &c.

CUTLER'S SPECIFICATION.

NOW KNOW YE, that in compliance with the said proviso, I, the said Job Cutler, do hereby declare the nature of my said Invention, and the manner in which the same is to be performed, are fully described and ascertained in and by the following statement thereof, reference being had to the Drawing hereunto annexed, and to the figures and letters marked thereon, that is to say :—

My Invention relates, first, to certain novel constructions of wrought-iron chains, wherein the parts are so formed and combined as to offer greater security, and chains so constructed are less liable to fracture and derangement than the various wrought and other iron chains heretofore constructed.

Secondly, the Invention relates to the means of forming the links, bars, and bolts of such novel constructions of chains.

And in order to give the best information in my power, I will proceed to describe the Drawing hereunto annexed, in which the same letters of reference are used to indicate similar parts wherever they occur.

DESCRIPTION OF THE DRAWING.

Figure 1 represents a plan of part of a chain constructed and combined according to my Invention ; Figure 2 is an edge view of Figure 1 ; and Figures 3 and 4 show separate

Culter's Improved Method of Constructing Chains for Suspension Bridges, &c.

parts of such chain. The principle on which this chain is constructed is such that one set of bars, links, or bolts have circular, by preference cylindrical, projections formed thereon, and the other set of bars, links, or bolts have corresponding circular and by preference cylindrical sockets or cavities formed therein, so that when a projection of one bar enters a socket or cavity of another bar, the one shall correctly fit the other, yet allow of the projection turning in the socket or cavity, and in addition to such sockets and projections there are to be holes formed through the bars passing through the centre of each cylindrical projection, and also through the cavities or sockets, through which a pin is passed ; hence, when any number of pairs of links, bars, or bolts are combined together they will each and all be capable of movement on the pin ; and further, each bar or link with a socket will be capable of movement on circular projections, and the bars or links with projections will be capable of movement in their respective sockets, all which will readily be understood on a careful examination of the Drawing, aided by the following explanation thereof. *a, a*, represent the outside bars, links, or bolts of the chain ; they have each hollow cylindrical projections *b, b*, as is clearly shown in the Drawing ; *c, c*, are the minor links, bars, or bolts which have each four cylindrical projections *b*, two at each end, but on opposite sides of the bars ; *d, d, d, d*, are links, bolts, or bars, each having four cylindrical cavities or sockets *b'* to receive the projections *b* of the bars *a, c*. It will be seen that there are four bars, bolts, or links *a, c*, to three of the links, bolts, or bars *d* ; consequently, in order to make all parts of the chain equally strong or as nearly so as possible, the three bolts, bars, or links *d* should be each somewhat stronger than a bar, bolt, or link *a, c*. The two sets of bars, bolts, or links are combined together by means of the wrought-iron pin *e*, which is passed through the holes formed through the centres of the cylindrical projections and through the holes in the sockets ; the pins *e* may be fastened by riveting or by hav-

Culler's Improved Method of Constructing Chains for Suspension Bridges, &c.

ing a head at one end and screw and nut at the other ; *f*, *g*, are pins which pass through the links, bars, or bolts *a*, *c*, and *d*, by which the parts are more closely combined, and offer a means of holding the chain together even though a pin *e* should be broken or fall out, for it will be evident that the sockets and projections, being retained together by the pins *f*, *g*, the chain would work safely, but I consider the pins *e* should at all times be employed, though the pins *f* and *g* may be dispensed with when desired, and when used they may be riveted or have screws or nuts, as shown.

Figure 5 shows a plan, and Figure 6 an edge view, of chains constructed according to another part of my Invention, differing in some respects from that already described.

Figure 7 and Figure 8, showing separate views of the two descriptions of bars, links, or bolts employed. In this case there is one class of bolts, bars, or links which have cylindrical projections similar to those already described, the other bars, links, or bolts having holes formed through them of the same form as the projections, in place of having recesses ; consequently two bars with projections being laid together, having another bar *d* with holes through it (of the required size) the projections may be said to act as an axis to the other or intermediate bolt, bar, or link *d*, on which the same may turn freely. In this case I have only shewn two bars *a*, *a*, to one bar *d*, but it will be evident that by forming some of the bars *a* like the bars *c* of the former chain, that is, having four projections *b* on each, a wide chain may be made according to the purpose to which it is to be applied, and it will be evident that by combining the links, bars, or bolts *a*, *a*, in pairs with one link *d* to each pair, a chain may be made only half the width of Figure 1 ; and further, by using more of the links, bars, or bolts *c* and *d*, wider chains may be made than those shewn at Figure 1. I would remark that the chains shown at Figure 1 is suitable for pit chains, cables, and suspension bridges, the only difference being that in making chains for suspension bridges the links, bolts, or bars must be longer and stronger

Culler's Improved Method of Constructing Chains for Suspension Bridges, &c.

in proportion to their increased size, and the chain, Figure 5, is suitable for driving machinery or other purposes, my Invention only relating to the modes of forming the junctions of the links, bolts, or bars for whatever purpose they may be applied. I have not thought it necessary to show many different lengths of links or bars, and they will necessarily be varied according to the purpose to which they are to be applied, as will also their figure or shape, whilst the modes of connection will remain the same. It is important that the various parts of such chains should be made with care and with considerable accuracy, in order that one link, bar, or bolt should not have to bear more strain than another, and that the sockets and projections should accurately fit, allowing, however, of the same turning with freedom, and in order to accomplish such accuracy of the parts I have invented suitable dies for stamping the bars, links, or bolts *a*, *c*, *d*. For making the bars *a* I have two dies fitting accurately together, and having projecting studs and holes to receive them, whereby the two dies are at all times ensured going accurately together. In one of such dies is formed a recess of the figure of the bar, link, or bolt *a*, and of such a depth as to receive about half the thickness of such link *a*. The other die is similarly sunk to the first, but in addition thereto there are two recesses therein equal to forming or shaping the projections *b* with a nipple or stud in the centre for the purpose of piercing the necessary hole for the pin to pass through, but if such hole should not be pierced entirely through by stamping, the piercing may be perfected by the means of a pair of piercing tools in a press. And in forming the bars *c* two dies, such as the one last described, are to be used, in order to form or shape the projections *b* on each side of the bars, links, or bolts *c* with nipples or studs therein to pierce the hole for the pins to pass through, as before described. In making the bars, bolts, or links *d* the dies are to be the reverse of those for producing the projections *b*, such dies having projections formed therein to produce the sockets. I would

Cutter's Improved Method of Constructing Chains for Suspension Bridges, &c.

remark that I am aware that the links, bolts, or bars of ordinary chains have been before made by stamping them in dies ; I do not therefore claim the use of dies for such purposes generally, but my Invention only relates to the improved mode of constructing dies suitable for shaping projections *b*, and for producing cavities or sockets *b'*, as herein explained. In forming the bolts, bars, or links previously to stamping, I either forge the same into as nearly the figure desired as possible by hand, or cut them out of thick sheet iron by means of a pair of tools worked in a press, or else I have bars rolled, leaving projections or recesses (as the case may be) at suitable intervals, and each link being heated to a bright red heat it is inserted into its proper dies, and by pressure or by blows the same are caused to close and produce the figure of link, bolt, or bar desired, after which the projections *b* and the cavities are to be finished in the lathe by means of suitable tools.

Having thus described the nature of my Invention, I would have it understood that what I claim is,—

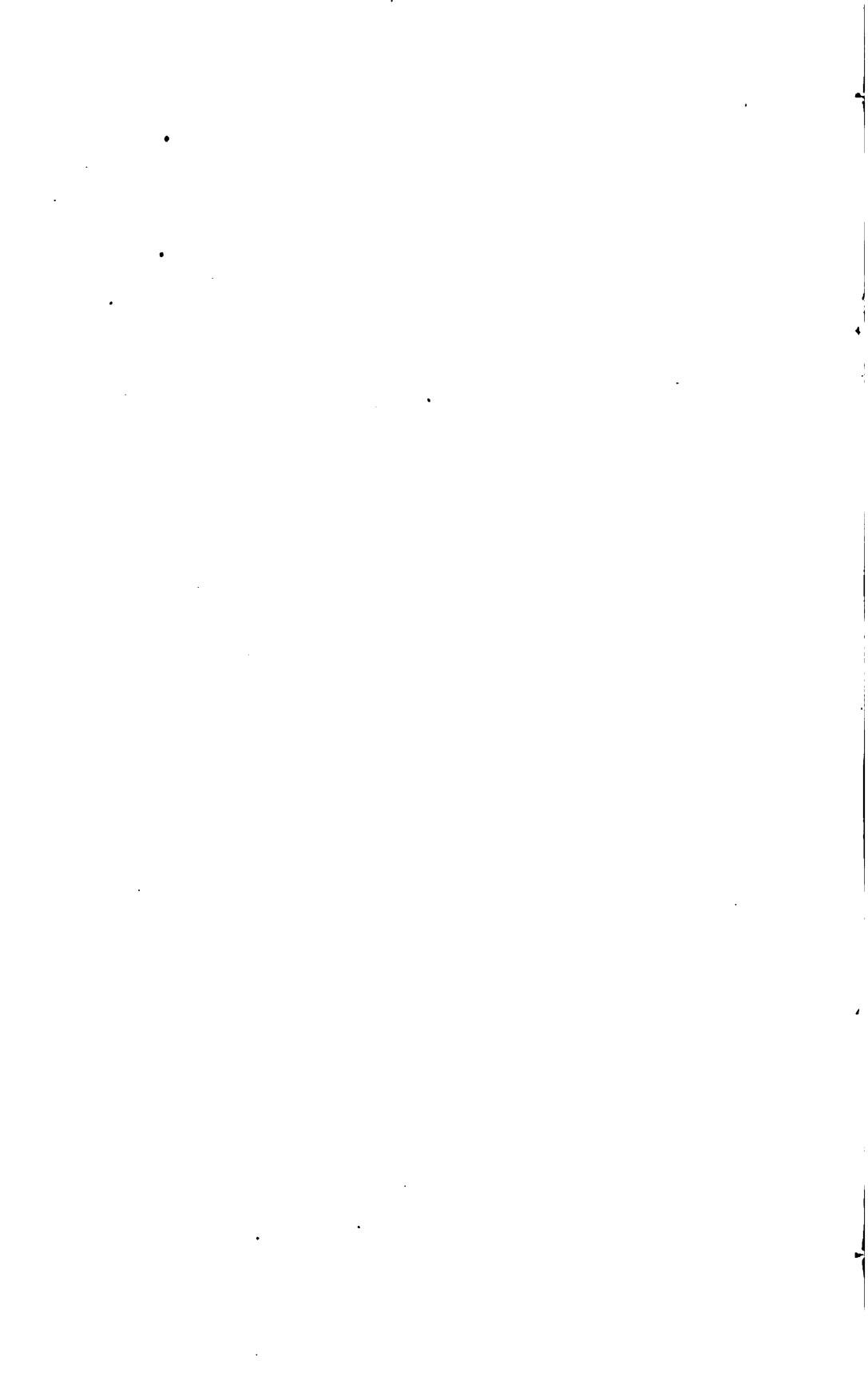
First, the mode of constructing and combining the parts of wrought-iron chains, which I have called the projections *b*, the sockets *b'*, and the wrought-iron pin *e*, as above described.

Secondly, I claim the mode of constructing wrought-iron chains with circular projections *b* and sockets *b'*, and pin *e*, as described, in respect to Figures 5, 6, 7, and 8.

And, thirdly, I claim the mode of making or forming links, bars, or bolts for chains with projections *b* and sockets *b'* by the aid of dies, as above described.

In witness whereof, I, the said Job Cutler, hath hereunto set his hand and seal, the Eleventh day of September, One thousand eight hundred and thirty-nine.

JOB (L.S.) CUTLER.



*Re CUTLER'S PATENT.***Before the Chancellor, April 19, 1839.**

(1 Web. P. C. 418.)

Proceedings on Sealing Patent. Utility. Similarity of Inventions. Caveat. Costs.

It is not necessary always to consider the question of utility in passing the letters patent.

The identity of purpose, and not of name, is the criterion in judging of the similarity or dissimilarity of inventions.

A party who had lodged an unsuccessful caveat against the granting of a patent ordered to pay to the patentee the taxed costs occasioned by the caveat.

Petition to the Lord Chancellor to seal letters patent.

The letters prayed for were for "an improved method or methods of constructing chains for suspension bridges, cables, mining and other purposes, and for an improved method or methods of making the bars, links and bolts thereof."

The petition set forth that the Attorney-General had reported in favor of the patent, as first applied for, there having been no opposition on a caveat upon which notice had been given. It alleged the delivery of the privy seal bill, bearing date March 11, on that day at the great seal patent office, and that in due course the patent would have been engrossed and sealed on the 12th. That on March 11 notice was received of a caveat having been entered on the 9th, whereby the patent was stopped, and on the 12th a petition was presented by Cutler that the caveat might be discharged and the letters patent sealed; but before this petition could be heard affidavits were filed on behalf of the opponent Haines, stating that he had invented a chain which he believed Cutler to have pirated, and to be attempting to obtain letters patent for the same. That at the hearing of this petition on March 25 the Lord Chancellor ordered that the matters of the said petition should be referred to the Attorney-General, to inquire and report whether the letters patent ought to issue; that all parties should be re-

strained from doing any act relating to the said invention until after the report of the Attorney-General, which was to be made to the Lord Chancellor ; and that if the Attorney-General should report that the patent ought to issue, that the same should be sealed as of March 12, but not to be sealed until further order ; the question of costs reserved. That at the hearing before the Attorney-General on March 27, it was agreed that each party should produce a model of his invention, and the Attorney-General decided, and the opponents admitted, that there was no similarity between the inventions. That the opponents thereupon attacked the novelty of the invention, and a drawing was produced from a specification of a patent granted to Fussell and Douglas in 1799, but the Attorney-General decided that the inventions were different, and that Cutler was entitled to have his patent allowed ; he required, however, an outline of the specification to be left with him, which was accordingly done ; the Attorney-General required a fuller description as to part, so as to show more distinctly the invention claimed, and promised to report to the Lord Chancellor on receiving the order of reference. The fuller description required was supplied by certain drawings, which, together with the order of reference, were left with the Attorney-General on the 28th, and Mr. Cutler left town, considering the matter settled. That on the 30th the opponents obtained the appointment of another hearing before the Attorney-General, on a statement that the drawing which had been exhibited as and believed to be a correct representation of Messrs. Fussell and Douglas's invention was incorrect, and upon examination of the original specification it clearly appeared that the invention for which Cutler had applied was old. That Cutler on hearing of this had some models made according to the specification and drawings of Fussell and Douglas's patent, and requested the Attorney-General to see these models before making his report ; but this request being refused, notice was immediately given that application would be made to the Lord Chancellor for an order for a further hearing, and that the Attorney-General should in the mean time withhold his

report. That the Attorney-General, however, on April 2 made his report, whereby he certified "that, having examined all proper parties and inspected and considered all necessary papers and documents relating to the matters in his lordship's order mentioned, he was of opinion that the patent ought not to issue, on the ground that the alleged inventions are not new and useful." And he further certified "that this was a different ground from that upon which the caveat was lodged against the said patent, and that it was not until the second meeting that the party objecting to the said patent was prepared to substantiate the said ground of objection thereto."

The petition then stated, as exceptions to the above report, that the ground alleged therein not being before the Attorney-General under the Chancellor's order of March 25, as matter included in the caveat against the great seal being attached to the patent, the Attorney-General was not authorized to go into such foreign matter, or to adopt the proceedings he had adopted ; that the Attorney-General having admitted *ex parte* statements and evidence, the petitioner was entitled to have been allowed to disprove such statements and evidence ; that the ground of the report, that the inventions were not new and useful, applied to only one of the four inventions ; that the report was grounded on false and fraudulent drawings and representations ; and that no disinterested person of science had been called in competent to assist the Attorney-General in coming to a proper conclusion.

Wigram, for the petitioner. The case made by the respondents to the original petition to affix the great seal was, that the invention for which we were seeking to obtain a patent was an invention of their own, and that a communication having taken place between themselves and Mr. Cutler, he had thereby acquired the knowledge of their invention, and was about fraudulently to obtain a patent for that invention. It was quite open for them to suggest anything as to the novelty or the utility, because that was the case they suggested. An application for a patent is not *ex debito justitiae*, and the parties are at the discretion of those

who advise the Crown whether it should go on or not, and therefore the case cannot be put as one in which there was any infringement of the right between the parties, because, supposing all the world were willing that you should put your seal to the patent, if you are of opinion that it is not a proper patent, you would not do it. The parties went before the Attorney-General, and your lordship made it part of the order that if the report should be in favor of the patent you would affix your seal to it, as upon an antecedent day to the order of March 12, so as to prevent any evil arising from the intermediate discovery. The parties met before the Attorney-General, and when they went there the only question to be raised before the Attorney-General was whether what we called our invention was, as alleged by the respondents, the invention of Mr. Haines, who had lodged the caveat ; the Attorney-General as to that ground of objection, taken by Mr. Haines, reported that there was no foundation for it at all ; consequently if it rested upon that alone, there would be no difficulty in the present case. But the case took a turn, which has involved Mr. Cutler in this difficulty. The parties appeared before the Attorney-General, and it being a part of the order that the patent should be sealed as of an antecedent day, there was no object whatever for one party concealing from the other what his invention in truth was. It was then agreed between the parties, and this is sworn to by two witnesses, and not denied, that each should produce his own model for the inspection of the Attorney-General, and if it turned out that Mr. Cutler's invention was not the invention of Mr. Haines, that the patent should go. That was a contract to which the Attorney-General was no party, and neither he nor the parties therefore would be bound by that agreement ; but that was the agreement sworn to between the parties, and it was understood that no further impediment should be thrown in the way of the patent being sealed if it turned out not to be the same invention. Mr. Cutler did produce a model of his chain, and the other party produced a model of their chain, and the Attorney-General was clearly of opinion that the two were in no respect similar, and he was

also of opinion that Mr. Cutler's patent was a meritorious invention, and one which entitled him to a patent, and that the patent should go. The Attorney-General did afterward, in point of fact, prepare a report in our favor. It appears that Mr. Farey, the scientific gentleman who had acted on behalf of Mr. Haines, to explain to the Attorney-General what the nature of Mr. Haines's invention was, on the Attorney-General being of opinion that there was no similarity between the two, and that that appeared upon a comparison between them as *amicus curiae*, stated that the invention was not new, and the Solicitor-General said that he should take the opinion of the court on the present case, not as to whether Mr. Haines has a right to oppose this on the ground that it is a copy of his invention, but whether upon the mere ground of discretion in the Crown, whether the court will or not consider this as a useful invention for which a patent should be granted ; and if he is to advise the court on the case or give information, of course it is immaterial whether he is heard as counsel or in any other way whatever. But what have the parties done ? It is agreed, as sworn to by two witnesses, and not contradicted by any one, that it was agreed between these parties that if Mr. Cutler's invention was not the same as Mr. Haines's the patent should go. Mr. Farey tells the Attorney-General that he knew of a patent granted to two persons of the name of Fussell and Douglas, in the year 1799, which had turned out to be a useless patent, and that although Mr. Cutler's patent bore no sort of resemblance to Mr. Haines's, it was the same thing as the patent granted in 1799 to Fussell and Douglas ; and he then produced or made certain drawings, in which he informed the Attorney-General of what Fussell and Douglas's invention was, and what their patent was for. The Attorney-General, on the inspection and comparison of these drawings with Mr. Cutler's invention, was still of opinion that Mr. Cutler's invention was new and useful and original, and that a patent ought to be granted for it ; and there was a report actually prepared by the Attorney-General to your lordship in favor of Mr. Cutler's patent. This took place on March 27, and the

parties went away conceiving the case was closed. It appeared that Mr. Farey afterward went to the Patent Office, and upon the inspection of the specification of Messrs. Fussell and Douglas, he wrote to the Attorney-General informing him he had done so, and that upon a more close inspection and examination of the case than he had been able to give it before, it appeared to him that Cutler's invention was the same as Fussell and Douglas's, although it had not appeared to be so from that drawing on the 27th. That having been stated to the Attorney-General, the parties met again by appointment before the Attorney-General ; but it happened then most unfortunately that Mr. Cutler, supposing all concluded, had gone away ; but his solicitor and Mr. Carpmael attended for him, and endeavored to satisfy the Attorney-General that the two, in point of fact, were different, and that *prima facie* upon comparison the difference appeared to be perfectly clear. The report made by the Attorney-General, therefore, as it now stands, is in these words : he reports on April 2 "that he was of opinion that this petitioner's patent ought not to issue, on the ground that the alleged inventions of the petitioner are not new and useful." That wholly depends on the comparison of the two chains ; and he further certifies that "this was a different ground from that upon which the caveat was lodged against the said patent, and that it was not until a second meeting before him that the party objecting to the said patent was prepared to substantiate the said grounds of objection thereto." There are several affidavits of scientific men, and it will appear that the Attorney-General fell into the mistake by a comparison of the drawings, the two models of the two inventions showing them to be most essentially distinct from each other, and further that the invention is obviously one of a very ingenious kind, and likely to be of great public utility ; at all events, where an invention is new, and there is the strong opinion of scientific men that it will be useful, and be found of great use in practice, the seal will not be refused to a patent because some one is found to say that it will not turn out to be useful, though it is new.

The attention of the Attorney-General could not have been sufficiently called to that part of the case ; he considered there was nothing in that part of the case which had not been examined before, and therefore that he might at once dispose of the whole case. If a person obtains a patent that is too large, and in part is not new, then the patent is void ; but if any application be made to the Crown for a patent for an invention of which part is only new, there is nothing to prevent the Crown from saying that it will grant a patent for that part which is new. This is not a case of a patent granted, but to be granted. The Attorney-General required to be produced before him a sort of a description of the two things, and a description was sent him beforehand by a very eminent counsel, and the Attorney-General wrote at the foot of the paper that the party was entitled to the patent as soon as the order of reference was brought him ; the Attorney-General afterward unfortunately changed his opinion, and the case now comes before the court on the point as to whether the Attorney-General was right or not in making such a report. [Lord Chancellor COTTENHAM. For what do you claim the invention ?] We state that in the specification. [Lord Chancellor COTTENHAM. That is the way in which you describe it, but you must show your title by showing what the invention is.] The application for a patent is on two grounds : 1. For an improved method of constructing chains ; and, 2. For an improved method of making the bars, links and bolts of which the chains are constructed ; and to state in one word what is the improvement we claim in the construction of chains, it is the combination of what is termed the pummel and socket, with the pin passing through the whole substance of the chain, so as to give the additional strength that is given by the combination of the two parts of the chain. The combination of the pummel and socket, we say, in all chains manufactured before these has not been that combination ; the pummel and socket are altogether new in themselves, and there has never been in the making of them that which gives the strength and benefit resulting from the combination ; moreover, we claim this as altogether new, the whole chain

being constructed of wrought iron, instead of being constructed partly of wrought and partly of cast iron. With respect to the improved method of constructing the bars, links and bolts, what we claim there is a method by which we make those links and bolts in moulds and frames different from any which have ever before been invented on that subject ; our models and frames have not been produced, and no question having been raised before the Attorney-General on that part of the application, it was not considered necessary to produce them.

Rolfe, Solicitor-General. Before proceeding to any observations on the nature of this invention, it will be necessary to call attention to a circumstance which will require your lordship's judgment before the party shall be called upon to go into the points of resisting the proposition that this is a new invention, namely, whether your lordship has any jurisdiction on the subject ? I cannot say there is no jurisdiction, but I have in vain endeavored to call to my recollection any case in which a party came to the great seal, as Mr. Cutler does, applying for a patent in the first instance—it is just the same thing as if he had never been before the Attorney-General—nay, it is worse, because he has been before the Attorney-General, and the Attorney-General represents that there ought not to be a patent, and the same case now comes before your lordship by way of appeal from that decision. I can see no principle which can entitle this party to ask your lordship to decide against the Attorney-General, that will not in every case where a patent is rejected by the Attorney-General entitle the party to come and say the Attorney-General has decided wrong. [Lord Chancellor COTTFENHAM. I have all the authority here, as if it had come before me originally without objection. At the last moment the Lord Chancellor may refuse to affix the great seal. I sent it to the Attorney-General before for my own information. I have all the authority for affixing the great seal.] In fact, it is now substantially before your lordship in the same way, in point of substance, as if the Attorney-General had said there ought to be a patent granted. [Lord Chancellor COTTFENHAM. The

question now before me is whether it appears to me that there is sufficient reason for not obeying the direction I received from the Crown for affixing the great seal to this patent. Do not let it be understood I exercise original jurisdiction over the matter.] The difficulty is this: the matter has once come before your lordship. You have a jurisdiction on the subject by virtue of an erroneous report of the Attorney-General; that is, because the matter was not brought under his consideration. [Lord Chancellor COTTERHAM. I do not act on the Attorney-General's report at all. That report is for the Secretary of State.] Your lordship acted on the seal bill of course. The question then is as to what your lordship, as holding the great seal, should do on the facts of the case as they are not disclosed. Now, how does this matter come on? It came before your lordship on a petition that you should obey the privy seal, and affix the great seal to a patent. Your lordship has reason to doubt whether that course should be taken—whether, in fact, the Crown has not been ill-advised—and therefore refers it to the Attorney-General, just in the same way as if the great seal had been affixed and some party had then applied by scire facias to have these letters patent repealed. Your lordship refers it to the Attorney-General to see whether the patent ought to issue. That was the reference. The party opposing the issuing of the letters patent goes before the Attorney-General and contends that they ought not to issue because the invention is not new, and because it interferes, as he supposes (not knowing exactly what it is), with an invention of his own, and consequently, of course, cannot be new. He goes before the Attorney-General and produces his invention, and Mr. Cutler produces his invention, and there is this advantage, which does not arise in the ordinary cases, that the parties go and each one discloses his own invention—because Mr. Haines, not asking for a patent for his own invention, does not care about making it public, and Mr. Cutler, having got the matter in such a state that his patent will bear date on an anterior day, will not be prejudiced by producing his invention—so that both parties produced their inven-

tions. Mr. Haines produces his invention, which is not now in question, which it is necessary I should draw your lordship's attention to, just to show what that is. The Attorney-General was of opinion that the inventions were substantially different, and that there was sufficient novelty, and that he would report in favor of the invention. The opponents at this time were but ill-informed of the real nature of Fussell's invention ; afterward, in consequence of further information, another meeting was appointed, a scientific person attended on both sides, and the matter went on till the Attorney-General came to the opinion, on looking more minutely into the matter, that there was no novelty or sufficient novelty in the invention of Mr. Cutler. I mention this in order to get rid of the impression that seems to have been created that there had been some sort of *mala fides* on our part, because it was referred to the Attorney-General to report what were the real merits of the invention. Suppose Mr. Farey's notion was right, and suppose Mr. Cutler's was not ; would it not have been monstrous to have let the Attorney-General report to your lordship that it was fit that a patent should issue only to put the parties to the expense of coming the next day for a scire facias to repeal it ? It was the duty of the party, if he meant to question it, not only his obvious interest, but his duty toward the other party, to question it on that stage which would give rise to the least expense and inconvenience. The matter was brought before the Attorney-General, and he came to the conclusion that he did not think Mr. Haines's invention interfered in point of novelty with Cutler's, yet that Fussell and Douglas's did, and therefore he reported to your lordship that no patent ought to issue. It was further discussed before the Attorney-General, I believe upon the second ground, for the invention claimed consists of two distinct propositions, the one in the mode of putting together the chain, the other the mode of making the links of which the chain is composed, and it was contended before the Attorney-General, on the second ground, that there was ample reason for reporting against the patent, because everybody had a perfect right under

patents that were granted to stamp anything out of wrought iron. Of course there could be no patent for that, it being well known that wrought iron must be stamped in this way to make any shape or machine of any piece of metal for whatever purpose used ; it would be monstrous that there should be a patent granted for stamping a particular thing, the process of stamping bars and other things of wrought iron being a process perfectly well known, and for which a patent was granted twenty-five years ago. That being the report made by the Attorney-General, the matter comes before your lordship. The Attorney-General being of opinion the patent ought not to be sealed, the parties come before your lordship and say your lordship is commanded by writ of privy seal to put the great seal to this patent ; and now the judgment of the Attorney-General is controverted, and the question is whether, under the circumstances, novelty is made out so as to justify the putting the great seal to this patent. I trust your lordship will think that this is not a fit case in which a patent should be granted, putting the parties to the inconvenience of instituting proceedings at law for the purpose of trying this question, but that your lordship will at once stop this and say that it is not a fit subject for a patent.

Lord Chancellor COTTENHAM. The first proposition on this case was on the supposition that those who now appear to resist the patent were the discoverers of an alleged invention similar to that for which a patent is now applied for ; that, upon investigation, turns out to be not well founded, and is not now persevered in. In the course of discussing that matter between the parties, an objection is raised of a general nature, not growing out of the patent right, but a general objection to the patent on two grounds : 1. It does not exhibit any invention of anything new ; and, 2. That what is proposed to be done would not be useful if introduced in practice. With regard to the second, it is not very easy sitting here to form any very conclusive opinion as to the usefulness, nor is it very necessary to inquire into that (particularly considering from whom the objection ema-

nates), because if it be so perfectly useless as is represented, it will interfere with no man's rights, and it will be a mere dead letter, which no man would wish to imitate if he had the right ; but as far as I can come to any conclusion from what is represented to me, I consider it is a considerable improvement. I may be mistaken ; but certainly at present I am not satisfied it is not an improvement. With regard to the novelty, there really seems to me to be very little doubt or difficulty. It appears hitherto all chains have been formed on either one or two principles—either by one branch of the chain being linked into the next, and that is the ordinary, most simple chain, or else the different branches are connected together by holes perforated through each and connected by a pin or screw ; these appear to have been the two modes adopted in all manufactories of chains. The present party who applies for a patent says, I adopt bolts, and I unite the two, and the joint of my chain consists not only of that which constitutes a link, and therefore would be operative without a pin, but it is also constituted of a pin, and instead, therefore, of having a joint of one character on the other, my chain has two joints, one consisting of the link, the ordinary link, the other consisting of the pin. That was the view the Attorney-General took of it when the case was first brought before him on the reference back by me, and he was of opinion there was that union and combination of the two principles which entitled the party to a patent for the alleged course he intended to pursue. It appears afterward the Attorney-General's opinion was altered, on the ground that he had it represented to him, and he considered the case as it was represented, that Fussell and Douglas's patent also had this application of the pin, or at least an application so similar to what is now proposed as to deprive the party to the claim of novelty in the invention. I think the facts could not have been brought under the Attorney-General's consideration as they have been brought under my consideration, because the sole similarity is in the term used. It is one of those many instances in which a conclusion arises from an inapt use of the same term. This thing may be called a pin, and may

be correctly called a pin, and the other no doubt may be called a pin ; but it is not because they go by the same name they are to be considered as identical ; they are not used for the same purpose in any one respect. This of Fussell and Douglas is a variation from the original mode of making chains--namely, of one branch of chain being linked within and turning in the other. This section of the model of Mr. Cutler's chain, which I have had given to me to-day, exhibits this in a very clear light. Take away one of the links, and see how this stands when the next link is taken away. Here is a solid substance—that is, solid except that it forms two parts, consisting entirely of the substance of one of the links, which next link is connected with it, and a joint is formed by being inserted within that link so perforated, and that is a link in the ordinary sense of the term, varied in form, but still it is the same ; there is no joint constituted with any pin, but there is the introduction of one link into the substance of the other, and so they are connected, and that constitutes a joint. It is true, for a purpose which I shall presently explain, according to my view of the case, that in the more solid branch of the chain there is that which is called a pin going into the solid part and projecting to a certain extent beyond the surface of it. To suppose that was inserted for the purpose of strengthening this part might be a rational conclusion, if it were not from the form and shape of the link which is to be connected with it. Which of the two is the strongest ? And it would be the greatest absurdity in the world to strengthen that which is strong and to leave unaided that which is entirely weak, as of course the chain would give way in the weakest part if any part of the chain gave way. There cannot possibly be a doubt, if a weight were suspended on the chain beyond the power which it has the strength to bear, it would not be the solid substance which would give way ; it would be that part which is perforated and which is left comparatively weak ; it cannot, therefore, possibly be for the purpose of adding strength, if it would add any strength, but the specification explains what it is. The specification says that connection—that pin, as it is called

—shows the different parts coming together by means of wire pins cast in the iron ; this substantial link consists of three parts, which are so connected that when they have one in use they may maintain relative positions. Therefore it is the centre part, as connected by the pin at the two extremities, which enter into part of the exterior piece to keep it in its proper position, which exactly corresponds with the description here—pieces coming together by means of wire pins cast in the iron. This model does not represent this piece as perforating that central part, and therefore is not calculated to add to its strength, but is well calculated to maintain it in its position, because it does enter to a certain depth. That corresponds also with the specification in Fussell and Douglas's patent, where it describes it that R represents the different parts all completely put together, which are kept in that position by means of a screw placed in the centre, not by means of a pin at the two extremities, but by means of a screw placed in the centre, accurately describing the model put in by Mr. Cutler, but not at all accurately describing the model of the other party, because that does represent these pins as coming through the centre, which is contrary to the plate in this book copied from the specification, and also contrary to the plate I asked to see in order that I might ascertain whether there was any mistake, the plate being small in the book, and therefore not easy to ascertain what is represented. I have no difficulty whatever in considering this as the accurate representation of the plate, as it is to be found in the specification in Fussell and Douglas's patent. Supposing it had gone through—not going through tends more distinctly to prove it is not intended for that purpose—but supposing it had gone through, it would only tend to strengthen the crank, and could not possibly be applicable to the purpose of forming the means of connecting the two links. It would have had nothing to do with that, because here the whole substance in which the other link is to turn is constituted of the substantial part of the adjoining link. The pin does not come in contact with the other link at all ; the two links are not connected together by it, and the utmost use

it would be of would be to strengthen the parts through which it passes. On the other hand, when I look at the proposed chain, I find it does in all respects adopt the two principles of the chain. It entirely adopts the principles of the two parts of the chain being linked together by their own substance, the best proof of which is that there is no pin in this, and as long as these two exterior parts are kept together and pressed on the third part, there is perfect security, and nothing can give way because there is that pummel and socket, the two exterior ones projecting far enough into the interior one to constitute a joint of itself, and it furnishes a complete chain as far as the next two exterior parts rest in the middle part. No doubt it would not be so strong, because there would be a perforation going through the whole, which would, of course, diminish from the strength of the otherwise solid substance that is supplied by a pin—a pin which will act and constitute a proper joint, and constitute a proper connection if the two links of the pummel and socket were entirely out of the way—not, of course, of the same strength, but operating as a joint, and as a means of connecting the two parts together ; this chain, therefore, has both principles in actual operation at every moment. It is either a chain depending on the pin or screw through, or it is a chain depending on the two parts of the chain being linked together, and so constituting a chain on the original principle on which chains were made, and that appears to me to be a combination of these two parts which, according to the opinion of the Attorney-General, formed, when he understood the matter as it really does exist, a combination of principles which was properly calculated to support a patent. The Attorney-General was impressed with the idea that the pin used in Fussell and Douglas's patent was on the same principle as that proposed to be used in the patent under consideration. On examination it turns out, though it is called a pin, to be a piece of metal applied to a totally different purpose, not performing the same duties or applicable to the same object. If I find any part of that which is claimed sufficient to entitle the party to a patent, my opinion is, he is entitled to his patent

for that application of the two principles constituting the joints of the chain as they are constituted. It is for him to consider to what extent he can make the claim, and in the present state of the matter I have no reason to consider how far he may establish his patent beyond that which is directly under my consideration. The patent only gives him a right to that which he may choose to specify in the specification. I am of opinion this patent is good, and it is for him, of course, to consider whether he will carry it any further.

Wigram. I trust your lordship will think we ought to have the costs of the proceedings before the Attorney-General—it was entirely a misrepresentation.

Lord Chancellor COTTENHAM. My difficulty is whether I have jurisdiction ; I certainly should give the costs in the case if I found it was within the province of the court to do so.

Wigram. Your lordship reserved the costs under the order which you made, and for that reason I should think your lordship would have the power of giving the costs ; perhaps your lordship will allow us to mention it again.

Upon a subsequent hearing costs were allowed, and the letters patent were sealed as of March 12.

BACON v. SPOTTISWOODE.

Chancery, May 4, 1839.

(1 Beav. 382.)

Laches in Applying for Injunction. Burden of Proof.

Where a bill is filed by a patentee for an injunction to restrain an alleged infringement of his patent, the plaintiff is not precluded from asking for an injunction at the hearing by the fact of his not having applied for it on an interlocutory motion ; but the not moving for the injunction imposes on the plaintiff in such a case the obligation of making out a clear and unexceptionable title at the hearing ; and if he fails in that, and has not previously obtained an injunction, he will not be allowed to use the facts proved in the cause as evidence of a *prima facie* cause, giving him a right to further time, for the purpose of enabling him to establish more satisfactorily his legal title.

A patentee brought the cause to a hearing without having previously moved for an injunction, and the court being of opinion that on the evidence then produced an injunction would not have been granted on an interlocutory application, refused to retain the bill to give the patentee an opportunity of establishing his right at law, but dismissed it with costs.

Motion for injunction to restrain infringement.

In this case it appeared that the plaintiff, Hugh Ford Bacon, and a Mr. Hutchinson, had each obtained patents for improvements in the construction of the common argand gas-burner. The plaintiff's patent was granted in July, 1829, and that of Mr. Hutchinson in October, 1834. The invention in both cases consisted of an alteration in the interior cylindrical passage, through which the atmospheric air passes to supply the oxygen necessary for the combustion of the inner surface of the jet of gas. In the common argand burner the passage, in its whole extent, forms a cylindrical tube of uniform diameter; the plaintiff's invention consisted, in effect, in placing internally, at the top of this passage, a solid metal ring of peculiar shape, described in the specification as "a cylindrical piece of metal, having a hollow frustum of a cone formed in it internally, as shown at H (in the diagram). This frustum of a hollow cone is inverted, by which means the smallest aperture is placed downward, forming the means of limiting the supply of air to the internal part of the flame ; and by making the part from H to G conical or any shape that will permit the air to spread or expand so as to strike or impinge on the flame, a great increase of light will be effected by this additional appendage."

In Mr. Hutchinson's improvement the interior air passage was gradually contracted upward in a curvilinear form, until it nearly reached the extremity, and from that point it increased in a right line to the top, forming a conical passage ; so that the construction of the upper part was in both cases very similar.

The object of both improvements was to produce a more brilliant flame and to diminish the consumption of gas.

The defendants in the first case, who were members of a

gas company, caused a quantity of Hutchinson's patent burners to be made by Messrs. Jones & Talby, the defendants in the second suit, to the value of £150, which they supplied to their customers at the same prices they paid for them.

The plaintiff, considering this to be an infringement of his patent right, filed his bill in October, 1835, against the company, which, after stating the plaintiff's patent, contained this allegation : "That the defendants have manufactured, or ordered or caused to be manufactured, and have used for their own benefit, and sold to divers persons for their own profit, divers large quantities of a certain gas-lamp or burner, which they call a double cone burner, and which is a counterfeit or imitation of the aforesaid patent gas-burner, in direct and gross violation and infringement of the said exclusive patent right of plaintiff." And after certain charges tending to show the piracy, the bill contained this statement : "That the defendants sometimes pretend that such counterfeit and pirated gas-burner was not, nor is the same manufactured or ordered or caused to be manufactured, or used or sold by them, or for their use, profit or benefit ; whereas plaintiffs charge the contrary of such pretences to be true."

The bill prayed "that the defendants might be decreed to render an account of all the said counterfeit burners which had been at any time theretofore manufactured or used and sold by the defendants, or by any person or persons by their orders, and of all such burners as they still had in their possession ; and to pay to plaintiffs all such gains and profits as had been received or had accrued to the defendants from the manufacture, use and sale of the said counterfeit gas-burner, by reason and in consequence of the same being an imitation or counterfeit of the aforesaid improved patent gas-lamp or burner," and for an injunction.

The plaintiffs had already, in August, 1835, filed a bill similar to this in form against Messrs. Jones & Talby, the manufacturers, and the defendants in both cases insisted that the making and using Hutchinson's patent burners was no infringement of the plaintiff's patent.

The plaintiffs made no application for an injunction before the hearing ; both parties went into evidence as to the two patents, and the case now came on for hearing on that evidence and on certain admissions between the parties ; the plaintiffs admitting that the company had sold the Hutchinson burners only to the persons whom they supplied with gas, and had not sold the same to any other persons, and that they "had not derived any profit from the sale of the said last-mentioned gas-burners, they having been sold at the same prices as were paid to the manufacturers for the same."

Except any inference which might arise from the circumstance of the admitted sale of Hutchinson's burners to their customers, there was no evidence of the company having used them.

The two cases were heard in succession ; the statements and arguments were very nearly the same in both cases.

Richards, Parker and Humphrey, for the plaintiffs, contended that Hutchinson's burners, which had been made and used by the defendants, were a mere modification of the plaintiff's ; that the plaintiff's invention formed the substratum of the Hutchinson patent, and that so far it could not be used until the plaintiff's patent had expired. (*Ex parte Fox*, 1 *ante*, p. 185.)

They also contended that, there having been an exclusive enjoyment by the plaintiffs of the patent until the piracy by the defendants, it was the practice of the court in such cases to grant an injunction in the first instance, without putting the patentee to establish the right by an action at law. (*Hill v. Thompson*, 1 *ante*, pp. 285, 299.)

That, although it had been admitted that the company had made no profits by the sale of the burners, yet it was clear that they had made a collateral profit from the use of them by their customers ; for the evidence showed that a considerable saving in the consumption of gas must have been effected by the use of the improved burners, and that consequently this case, as against the company, was similar to the case of *Crosley v. The Derby Gas-light Company* (2 *ante*, p. 513), where the defendants, having used the plaintiff's gas-meters, and having by such means effected a great

saving in expense, the court referred it to the Master to take an account of what profits had been received and what benefit derived from the use of such gas-meters as were made or manufactured during the existence of the letters patent, from six years previous to filing the plaintiff's bill down to that time; and the defendants were decreed to pay the amount with all costs.

That the court would grant an injunction where there could be no account. (*Universities of Oxford and Cambridge v. Richardson*, 6 Ves. jr. 704.)

Pemberton, Kindersley and Simons, contra, contended that the plaintiffs' patent was invalid, in consequence of the uncertainty of the specification, and of the nature of the alleged invention; but if not, then that the Hutchinson patent was an independent discovery, and not a piracy of the plaintiffs; that the plaintiffs, having neglected to move for an injunction, had precluded themselves from asking for one at the hearing. They insisted that this court had no jurisdiction to give a plaintiff a remedy for an alleged piracy unless he could make out that he was entitled to the equitable interposition of this court by injunction, which the plaintiffs had not done in this case; and that therefore they were not entitled to any account or relief. No relief had been asked against the company in respect of the selling, because it had been admitted that they had made no profit thereby; and as to the other relief now asked at the bar, in respect of the benefit which the company might have derived from the use of the burners, no such case had been alleged by the bill, and no evidence existed as to the fact. They insisted that the case now stood upon the evidence; the plaintiff had not satisfactorily made out his case against the defendants; and that after the laches exhibited by the plaintiffs, they were not entitled to any further delay or to any indulgence from the court to enable them to make out a case which they had failed in doing upon the evidence at the hearing.

Richards, in reply, contended that if any doubt existed, the plaintiff was at least entitled to have an opportunity of showing the validity of the patent at law.

Lord LANGDALE, M. R. I will not now decide the principal question in the cause, but there are two points on which I will now express my opinion. I think that if a plaintiff be entitled to an injunction on the merits and on the evidence produced at the hearing, he is not to be deprived of that right because he has not moved for an injunction at a previous stage of the cause. The answer may be so speedily put in and so framed that it would be perfectly absurd for the plaintiff to move for an injunction, although he might be entitled to an injunction upon the merits at the hearing. The other point is this, that even if the plaintiffs should be entitled to an injunction against the company, they will not be entitled to any account. The bill alleges that the defendants have sold and used, it being the fact that they have sold for no profit, and it not appearing that they have used otherwise than by furnishing the burners to their customers. I am not prepared to say that, although the defendants have sold the burners without profit, yet that they have not derived a collateral profit from the use of them by their customers. That case, however, is neither alleged by the bill nor is it proved. Supposing the decision in *Crosley v. The Derby Gas-light Company* to have been correct, I am of opinion that the circumstances of the two cases are materially different; in that case I think the allegations in the bill were very different from those in the present case; and I am of opinion that, even if the plaintiffs are entitled to an injunction, they are not entitled to an account; and that they are not now to be deprived of an injunction because they have not applied for one at an anterior stage. The court will not impute to the plaintiffs the delay in bringing the cause to a hearing which has arisen from the pressure of business in the court. The plaintiffs in this respect have done all they could, but at the same time it must be observed that they have not in the mean time brought an action at law to establish their right, although they were aware of the infringement of their patent.

Lord LANGDALE, M. R. [at a subsequent sitting]. These two bills were filed to obtain an injunction to restrain an

alleged infringement on the plaintiff's patent and for consequential accounts. When a cause of this kind is brought to a hearing, it is for the purpose of having an injunction made perpetual, or continued during the legal right of the plaintiff under his patent ; and it appears to me that, however unusual the circumstance may be, the plaintiff is not precluded from asking for an injunction by the fact of his not having applied for it on interlocutory motion. The plaintiff, if he omits to move for an injunction at an early period of the cause, first shows that he does not consider the injunction as immediately necessary for the protection of his interest, and next imposes upon himself the obligation of making out a clear and unexceptionable title at the hearing.

I think that at the hearing of the cause the court has to look at the facts produced in evidence, for the purpose of considering whether a perpetual injunction should then be granted. On an interlocutory order, it has to look at the facts produced in evidence, for the purpose of considering whether an injunction should be granted till the right can be tried or further investigated. It is truly said that where a patent has been granted, and there has been an exclusive possession of some duration under it, the court may interpose its injunction without putting the party previously to establish the validity of his patent by an action at law ; but this interposition must nevertheless depend to a considerable extent on the circumstances of the case and the nature of the defence. The court is not bound to grant an injunction merely because a patent has been granted and exclusively enjoyed for some time ; and when the case is brought to a hearing I apprehend that the plaintiff ought to show his title clearly, and that if he fails in that, and has not previously obtained an injunction, he will not be allowed to use the facts proved in the cause, as evidence of a *prima facie* case giving him a right to further delay, for the purpose of enabling him to establish more satisfactorily the legal title upon which alone his equity is founded.

In this particular case, having regard to the nature of the patent and the specification and to the defence, the nature

of the alleged infringement, and all the facts which have now been proved, I think that the court would not, upon the same facts, have granted or continued an injunction previously to the validity of the patent being established by an action at law ; and therefore that the plaintiff has not done that which it appears to me he must be deemed to have undertaken to do before he set down his cause for hearing—he has not made out a clear and unexceptionable title ; and having failed to do so, the question which I have had to consider in his favor is whether the bills should be retained for a year in order to give him an opportunity of now bringing actions ; but for the reasons which I have stated, I think that this ought not to be done ; and having regard to the nature of the suit and the sort of jurisdiction which the court exercises in such cases, I am of opinion that the bills must be dismissed with costs.

Bill dismissed.

This decision was afterward affirmed on appeal July 26, 1839, under the name of Bacon *v.* Jones.

KAY v. MARSHALL.

Common Pleas, May 8, 1839.

(2 Web. P. C. 71.)

Patents for Improvements. Novelty. Patent for Process of Two Parts.

Where the specification divided the invention and subject-matter of the patent into two parts, *held*, that even if the invention were considered single and entire, yet if part of what was claimed were not properly the subject of a patent, or not new, the whole must be void.

A patent for placing the retaining rollers and the drawing rollers of a spinning machine, itself known and in use before, within two and one half inches of each other, *held* void.

Hearing of a case stated from Chancery to obtain the opinion of this court.

A general sketch of the long and complex litigation of which this proceeding may be called the sixth step, is prefixed to the report of the decision of the House of Lords, June 18, 1841, *post*. The present proceeding was the hearing upon the case directed by the order of Lord Langdale, M. R., made January 31, 1837 (2 *ante*, p. 416). This case, as settled, rehearsed the leading facts and proceedings in the entire cause, and set out entire the postea endorsed upon the verdict on the first trial, of the issue sent from Chancery (*ante*, July 23, 1836). The question referred to this court for its opinion was simply whether the plaintiff's patent was valid in point of law.

Pollock, for the plaintiff, relied on the finding of the jury on the issues, whether the plaintiff had invented new machinery and whether the invention was of public utility. The endorsement on the postea did not detract from the effect of that finding; for, though the reach of machines had varied in dry spinning before the plaintiff's invention, yet his process for macerating was new, and was rendered useful by being connected with machinery which spun the macerated materials at a shorter reach than had ever been applied to flax. The real invention was maceration and spinning at a specified distance.

The endorsement on the postea, however, could not be applied to the question which the court was called upon to decide—namely, whether the patent was void on the face of it. There was nothing on the face of the patent to affect its validity; for admitting that the principle of a varying reach in spinning machinery was known before, the application of that principle, in combination with the new macerating process, would support the plaintiff's right to a patent. If the case were otherwise no patent could be supported, for there was none in which the invention did not apply old principles to new modifications of machinery. Thus, Bramah's hydraulic press was founded on the principle of the hydrostatic paradox, with which all the world was acquainted before the invention of the press.

Follett, for the defendants. If a patent be taken out for two processes, one of which is not new, the patent is void,

notwithstanding the other process be new and useful. (*Brunton v. Hawkes*, 1 *ante*, p. 327.) Upon analyzing the plaintiff's patent, it will be clear that it has been taken out for two distinct processes—one for preparing flax by maceration, the other for spinning flax so prepared. In the machinery for spinning the flax the only novelty alleged is the reducing the reach to two inches and a half; but the practice of varying the reach according to the length of fibre to be spun must be taken to have been known before; for the endorsement on the postea is to be read in connection with the finding on the issues, and constitutes, with that finding, a special verdict. The plaintiff, therefore, by the second part of his patent, seeks to appropriate to himself the application of spinning machinery to fibres which, by his macerating process, he has reduced to two inches and a half. If this were allowed manufacturers would be precluded from varying the reach of their machines as they have always done before; and according to the plaintiff's argument, if a fibre were discovered in nature shorter than two inches and a half, neither the plaintiff nor any other could be permitted to contract the reach of their spinning machines accordingly. The patent, therefore, is void, for seeking to appropriate to the plaintiff, in connection with his own discovery, the application of a principle which was known before and practised by others.

Pollock, in reply, insisted that what the defendants attempted to divide into two distinct processes were only parts of one entire and continuous operation. The plaintiff's machinery, by maceration of the fibres and contraction of the reach, could spin flax at a distance of only two inches and a half between the rollers. No one could do that before, for flax cannot be spun by a cotton machine; and the jury having found that the invention was new and useful, there was nothing on the face of the patent to render it void.

TINDAL, C. J. In this case, which has been sent to this court by the Master of the Rolls, the question as to the validity of the patent has been argued before us upon vari-

ous grounds of objection ; and consequently, a certificate in the general terms of the question that the patent does not appear to us to be valid in point of law, could not give satisfaction to the court from which the question was sent. We therefore proceed shortly to state the ground upon which our opinion is formed, that the patent in question is not valid in point of law.

The patent is taken out for "new and improved machinery for preparing and spinning flax, hemp and other fibrous substances by power," and the invention is declared in the specification to consist of "new machinery for macerating flax and other similar fibrous substances, previous to drawing and spinning it, which is called the preparing it, and also for improved machinery for spinning the same after having been so prepared."

Now, although the first part of the invention described in the patent, viz., the new machinery for macerating, appears from the facts stated in the case to be a proper subject for a patent, both with regard to the invention thereof being original, and in all other respects ; yet the latter part of the patent, viz., the improved machinery for spinning flax, etc., does not, upon the facts stated in the case, and the description of the invention contained in the specification, appear to us to be a subject upon which a patent can by law be taken out.

The patentee, in describing the improved machinery for spinning which constitutes one part of his patent, informs the public "that he places the drawing rollers only two and a half inches from the retaining rollers, and that this constitutes the principal improvement in the said spinning machinery," and he then proceeds to assign the reason and principle upon which the alleged improvement rests ; and in the latter part of his specification (when stating the extent of what he claims as his own invention in respect of improved machinery for spinning flax) he describes it to be the wooden or other trough for holding the roving when taken from the macerating vessels, and "the placing of the retaining rollers nearer to each other than they have ever before been placed, say within two and a half inches of each

other, for the purpose aforesaid." So that, looking at the whole of the specification, it is not the use of the wooden or other trough, as used by him, upon which he relies, as indeed it obviously could not be, as an important invention, nor as the proper subject for a patent; but it is "the placing and retaining of the respective rollers within two and a half inches from each other" that forms the real subject-matter of the patent for the improved machinery.

Now, whether a patent can by law be taken out for placing the retaining rollers and the drawing rollers of a spinning machine (which machine itself was known and in use before) within two inches and a half of each other, under the circumstances stated in the case, is the real question between the parties, and we think it cannot. For it appears from the endorsement upon the postea that before the granting of this patent, flax and other fibrous substances were spun with machines by which the *reach* was varied according to the staple or fibre of the article to be spun, and that that had been a fundamental principle of *dry* spinning known and used before the granting of this patent; and further, that the *reach* used in cotton-spinning had been less than two inches and a half. The application, therefore, of a *reach* of two inches and a half to the spinning of flax when in a state of maceration, by which the fibre of flax will not hold together beyond two inches and a half, does not appear to us to be any new invention or discovery, but is merely the application of a piece of machinery already known and in use to the new macerated state of the flax. The fundamental principle in dry spinning was that the *reach* varied according to the length of the staple or fibre of the article to be spun; and spinning machines were in use either with the reaches fixed or connected with slides, so that their distance might be varied according to the length of the fibre of the article intended to be spun; and, consequently, there is nothing new in applying the use of a spinning machine with the *reach* of such a degree of shortness as would suit the continuity of the roving of the flax after it is macerated.

It is to be remarked that the application of moisture in

spinning flax, for the purpose of separating the fibres and reducing the length of the staple, was not new in practice, and had been resorted to under Hall's patent, though in a different manner from that employed upon this occasion. Now, suppose a patent to have been first obtained for some entirely new method, either chemical or mechanical, of reducing the fibres of flax to a short staple, we think that a second patent could not be taken out for an improved mode of machinery in spinning flax, which consisted of nothing more than the spinning of the short staple of flax by a spinning machine, with a *reach* of a given length not less than that already in use for the spinning of cotton, the effect of which would be to prevent the first patentee from working his invention with the old machine at the proper *reach*. And if a patent taken out for that object separately would be invalid, so also a patent taken out for an invention consisting of two distinct parts, one of which is that precise object, would be void also.

The answer given to this objection on the part of the plaintiff has been that the invention for which the patent has been taken out does not consist of two distinct parts, but has but one entire single object only—namely, the object of macerating and spinning that macerated flax on a machine where the rollers are retained at the prescribed distance from each other. But this appears to be at variance with the specification itself, which divides the invention and the subject-matter of the patent into two distinct parts; and even if it is to be considered as one entire invention, if part of what is claimed is not properly the subject of patent, or not new, the whole must be void. We shall therefore certify to his Honor that in our judgment the patent in question is not valid in law.

CHANTER v. LEESE.

Exchequer Chamber, Trin. T., 1839.

(5 Mee. & W. 698.)

License. Invalidity of Patent a Defence to Licensee.

By agreement, not under seal, between the plaintiff and A, B and C of the one part, and the defendants of the other part, reciting that the plaintiff had obtained a patent for an improvement in furnaces, and was solely interested in another patent invention ; that the plaintiff and A had obtained a patent for another invention, the plaintiff and B for another, and the plaintiff and C for another, it was agreed between the said parties that, for the considerations therein mentioned, it should be lawful for the defendants exclusively to use, manufacture and sell any or all of the said patent inventions, within certain limits, during the continuance of the several patents, on certain terms, viz., that an office and warehouse should be prepared for the sale of the articles connected with the inventions, and that books of account of the sale of each of the inventions should be kept there by each of the defendants, and be open at all times to the inspection of the parties thereto of the first part ; and the defendants should pay to the plaintiff £400 a year as a consideration for the license for the sale, etc., of all the aforesaid patents, and that such sum should be charged as a payment by the defendants in their books of account ; that they should pay A a certain ratable sum on all machines used, etc., on his patent principle ; that they should also pay the plaintiff a moiety of the net profit to arise from all the said inventions (except those in which B and C were interested) ; to the plaintiff and B two thirds of the net profits to arise from theirs ; and it was agreed that either of the parties might determine the agreement at the end of five, seven or ten years. In an action on this agreement, by the plaintiff alone, to recover a half-yearly payment of the £400, the defendants set out the plaintiff's patent for the improvement in furnaces, and pleaded that it was not at the time of the grant a new invention as to the public use thereof in England, whereby the grant was void, which the plaintiff, at the time of making the agreement, well knew. *Held*, that the declaration was bad on the ground of variance, inasmuch as it stated the agreement to be made between the plaintiff and the defendants, whereas there were other parties to it of the first part besides the plaintiff, from whom the consideration for the defendant's promise moved as well as from the plaintiff. *Held*, also, that the plea was a bar to the action.

It seems that the action ought to have been jointly brought by all the parties to the agreement of the first part.

Writ of error to review a judgment of the Court of Exchequer.

The arguments were in substance the same as in the court below. See 2 *ante*, Trin. T., 1838. This decision of affirm-

ance is reported in 9 L. J. Exch. 327 as having been rendered in June, 1840.

TINDAL, C. J. The declaration in this case states an agreement between the plaintiff of the one part and the defendants of the other part. The execution of the agreements by the defendants was proved, but the learned judge was of opinion that the variance was fatal ; on which the counsel for the plaintiff applied to amend, by inserting the names of the other parties to the agreement. The learned judge refused to amend, and directed the jury to find a verdict for the defendants, but at the same time to find that the defendants executed the agreement produced, which was set out on the postea. The Court of Exchequer, upon argument, held that the variance was material, and gave judgment for the defendants, according to the very right, under section 24 of 3 and 4 Will. IV., c. 42, upon which judgment a writ of error has been brought and argued. The judgment is, in the present case, in support of the verdict, but if it had been otherwise, no doubt can be entertained but that a court of error can review the judgment, the verdict being in the nature of a special verdict.

We are, however, of opinion that the verdict and judgment are both right. The agreement shows distinctly that the consideration for the defendants' promise moved not from the plaintiff alone, but from the plaintiff and the other parties who joined with him. It was therefore most material that the names of all the contracting parties should appear on the record, not only with a view to the defence which might be pleaded, but also to the evidence which might be adduced. It may easily be conceived that evidence might be admissible against joint contractors which would not be admissible against the present plaintiff alone ; and in many other respects it may have been most material that the agreement should have been stated as it really was. On this ground, therefore, we think that the judgment for the defendants on that part of the record must be affirmed. It is not necessary to determine whether, if the agreement had been truly set out in the declaration, the plaintiff could

have sued upon it alone ; but we should have felt no doubt upon that point if that question had been directly raised.

Upon the demurrer two questions arose : 1. Whether it was necessary for the plaintiff to aver that the defendants had enjoyed the use of the patents under the agreement ; 2. Whether the plea showing that one of the patents was void was a sufficient answer to the action.

We do not think it necessary to determine the first question, inasmuch as we are of opinion in favor of the defendants upon the second. There is no assignment of the patents by deed in this case ; no interest in them passed to the defendants ; but the whole matter rests in contract. The defendant is not in a situation with respect to the plaintiff similar to that of a tenant toward his landlord, and is in no way estopped from showing any failure of the consideration for his promise to pay the annuity to the plaintiff, which may be sufficient to bar the plaintiff of his action. It is admitted by the demurrer that a partial failure of the consideration has taken place—namely, that one of the six patents is void. The learned counsel for the plaintiff argued that, as no fraud is alleged, the defendant may have known that it was so void, and yet have entered into the agreement. We dissent, however, altogether from this reasoning. The patent being void, no benefit in respect of it could accrue to the defendants ; and we think we are not to presume that any such improvident bargain took place. But it was further contended that it must be taken on these pleadings that the other five are good, and also that the defendants have enjoyed the use of them, and consequently that they are bound to perform their part of the agreement by paying the annuity, and must bring a cross action for damages in respect of the one void patent. This reasoning would undoubtedly apply if the consideration had been divisible, and the money payable by the defendants had been apportioned by the contract to the different parts of the consideration ; in which case the principles laid down in *Boone v. Eyre* (1 H. Bl. 273, *note* ; 2 W. El. 1312, and other authorities of that class) would have governed the present decision. But here it is plain that the enjoyment of all the six patents

is the consideration for every part of the defendant's promise, and that the annuity to be paid is neither apportioned by the contract nor capable of being apportioned by a jury. And this is apparent by reading the agreement itself as stated in the declaration, in which the six patents are so closely connected with each other that the benefit expected by the defendants under the agreement is obviously to result from the use of all of them jointly, in such manner as the defendants may think fit, and the inability to use any one would manifestly endanger a great part, if not the whole, of that benefit. All the patents are admitted by the pleadings to be valid, but there is no admission that they have been enjoyed by the defendants, no averment to that effect being introduced into the declaration. We see, therefore, that the consideration is entire, and the payment agreed to be made by the defendants is entire, and we see also a failure of the consideration, which being entire, by failing partially, fails entirely; and it follows that no action can be maintained for the money. Even if it had appeared affirmatively that the other five patents had been enjoyed, we are of opinion that no action could be maintained on the agreement for the annuity, whatever question might be raised in some form as to some right of compensation for such enjoyment. Upon the whole, we are of opinion that the judgment of the Court of Exchequer must be affirmed.

Judgment affirmed.

WESTHEAD *v.* KEENE.

Chancery, M. R., June 12, 1839.

(2 Carp. P. C. 434.)

Retaining Injunction Pending Suit at Law.

Where the validity of the patent was contested, and the infringement denied by the defendant, *held*, upon the plaintiff undertaking to bring an action at law, that the motion for an injunction should stand over.

Application for an injunction.

The plaintiff, Joshua P. Westhead, obtained letters patent for an improved method of cutting caoutchouc or india-rubber, leather, hides and similar substances. The patent was dated February 16, 1836. An injunction was sought against Charles Keene and Christopher Nickels, charged with infringement. The London Caoutchouc Company, who had a contract with the plaintiff for the purchase of the invention, was also made a party.

Additional facts appear below.

Pemberton, for the plaintiff. The object of the invention is for an improved method of cutting caoutchouc, which may be cut into a sort of riband, which is done in a peculiar method—a method wholly unknown to be applied to the purpose until the present invention. The old method of cutting it was by having it in bottles, and then it was cut in a spiral form in the ordinary mode, which answered the purpose; but solid or irregular pieces of india-rubber could not be cut in that mode. The invention of the plaintiff has been used by the defendants for the refuse india-rubber, which they now press down and consolidate into a disk, and by means of a machine it is cut into bands or fillets; the consequence of which is, that they may be cut from that sort of india-rubber which before was merely refuse and wholly worthless. The defendants put in a demurrer, and upon the demurrer coming on, it was argued that the patent was invalid upon the face of it. (See 2 *ante*, p. 522.) It was said the description of a patent for an improved method of cutting caoutchouc or other similar substances, so as to render them applicable for various useful purposes, was an improper description, and the specification did not remove the difficulty which was supposed to exist from the too great distension of the patent; your lordship was of opinion it was impossible to decide that it was not right, and overruled the demurrer, and the parties are proceeding now upon the affidavits. My objections are partly objections of law and partly objections of fact; and probably all that can be done at present will be to direct an action to be brought. I do not imagine that the court will dispose of it without an action, but we hope, in the

mean time, an injunction will be granted ; and these parties, it appears, ought not to be permitted to go on using this invention in the mean time. If it is not a cause in which, considering the delay which has taken place, the court ought to interfere by way of injunction, perhaps your lordship will put the parties upon terms. By the process patented there is a disk of the india-rubber, above which is a circular cutting-knife. The principle of the machine is that when the winch, or whatever it is called, at the end of the machine is turned, the knife revolves, and then the india-rubber is gradually approximated to the knife which cuts the india-rubber, as the india-rubber turns round. There is a lateral motion, which keeps it up to the knife, and the knife itself turns, which cuts the india-rubber.

Tinney, for the defendants. The india-rubber revolving assists the cutting.

Pemberton. It keeps it up to the knife ; there are three motions by which this solid piece is cut.

Lord LANGDALE, M. R. Mr. Tinney, you say the patent is clearly bad, there ought to be no intervention at all, and, therefore, you decline keeping an account ?

Tinney. Oh, yes, my lord ; we don't use this invention.

Pemberton. If they do not, we shall fail at law. That is the question which will have to be tried at law. Mr. Westhead, in an affidavit, says "that in the latter part of July or the beginning of August, 1838, he was for the first time informed by Robert William Sievier that the defendants, Charles Keene and Christopher Nickels, were infringing his patent rights ; until which time he did not know that the defendants or either of them were infringing his patent rights ; and deponent believes that by such infringement the defendants have made considerable profits, to the manifest and serious injury of the deponent." The affidavit of Edward Woodcock, a mechanist, who was formerly in the employ of the defendants, Keene and Nickels, says he has for the last twelve years been engaged in mechanical pursuits, and is well acquainted with the business of a mechanist. That after the grant of the letters patent, and in March, 1836, deponent, with the assistance of Benjamin

Nickels (a brother to the defendant, Christopher Nickels), manufactured, or assisted in manufacturing, by order of Charles Keene and Christopher Nickels, for the use of the firm, a machine varying in some immaterial particulars and details, but otherwise precisely the same in principle, construction, mode of use and operation, as the machine invented and constructed by the plaintiff Westhead. The only difference between the two is the mode in which the disk is placed : in the one case it is horizontal, and in the other it is vertical ; it is precisely the same in every other respect ; the motion is the same ; the lateral motion is the same, and the rotatory motion is the same ; the only difference is, that the one is laid flat and the other round. Our letters patent were in February, and in March it is imitated in the manner I have described. Now, these affidavits were filed in support of the motion originally ; and instead of meeting the motion on those affidavits (which, to be sure, might have been done at once in a more satisfactory manner, if they say they have not infringed the patent), they filed a demurrer to the bill.

Why file a demurrer to put us to all the expense of the demurrer, and to put the court to the trouble of being occupied a day and a half on a long discussion on the merits of the invention, if the gentlemen are really justified in saying what they now say, that they had not for nine months before used our invention ? Mr. Tinney says they are not to keep an account, because they do not use our invention. Afterward (the demurrer being overruled) they filed affidavits in answer to our application ; and the first affidavit which I got is the affidavit of Mr. Christopher Nickels, the defendant. That in many respects contradicts the affidavit of Woodcock, and the question is, whether that is not a matter which must be tried at law. The defendant Nickels cannot be examined, but Woodcock will be put into the box, and will be cross-examined, no doubt, very strongly ; but to say that Mr. Nickels is to avail himself of his own evidence in a court of equity, when he could not do so in a court of law, is going rather too far. He says "he hath perused the affidavit of Woodcock sworn

on November 20, and he says he never was employed in the elastic department of the business" (what is meant by that I do not know), "but only in the grinding and recomposing of india-rubber in blocks for the use of stationers, and for sheet india-rubber and other purposes." The affidavit then refers to a French publication, which is said to contain the description of a similar invention, and that copies have been obtained by him and by other persons in this country in the course of the years 1834 and 1835. The effect of this affidavit is to say, as I understand it, that the description in the French work, published in the year 1834, contains an account of an invention similar to that for which the plaintiff has obtained his patent. The defendant then says "that on deponent's reading the printed copy of plaintiff's specification, he was unable to make out what the distinction, novelty or improvement was sought to be protected by the patent, inasmuch as it set forth no other species of machinery than had been used in separate parts or with some immaterial modification by deponent and others in the manufactory for cutting india-rubber only, and not leather, hides or other similar substances." The defendant says he had in constant use in their factory a machine similar to that described in the French work, which description was taken from the factory of Rattier and Guiball, in Paris. And then, my lord, he refers to another French work, entitled "Dictionnaire de l'Industrie Manufacture Commerciale et Agricole."

Tinney. It is another description of the same, my lord.

Pemberton. "That the said last-mentioned work contains a description of a process and machine for cutting india-rubber from flat disks into bands or fillets, upon precisely the same principle as the machinery and process used in this country." Then there is an affidavit of Mr. Keene, the defendant, who merely says that he never gave any order to Edward Woodcock, nor to his knowledge and belief did his partner, Nickels, ever give any order to Woodcock to construct a machine for the purpose of cutting india-rubber into tapes or fillets upon the principle of the plaintiff's patent invention. He says he has read the affi-

davit of Christopher Nickels, and he believes it to be true. Then there is the affidavit of Dr. Andrew Ure, principally giving his opinion upon the matter of law, and upon the validity of the specification. The principal part of his affidavit goes to show, I believe, that india-rubber is an elastic substance, and that the machine is for cutting india-rubber, leather, hides and similar substances into tapes and fillets, and so on. He is of opinion that the specification is invalid—a matter for a court to determine.

Lord LANGDALE, M. R. If you undertake to bring an action, I think I ought to let this motion stand over till you have brought your action and I know the result of that action, with liberty to the other side to apply at any time.

Tinney. I think, my lord, I can show your lordship that there is no pretence whatever for this.

Lord LANGDALE, M. R. It will not prejudice you in any way ; they undertake to bring an action, whatever is done with this motion.

Pemberton. We shall bring an action.

Lord LANGDALE, M. R. Upon the evidence, as I see it now before me, I think I ought not now to interfere until the action is brought. I say nothing about the injunction ; if they undertake to bring an action, I shall do no harm to anybody if I let this motion stand over until the action is tried.

Tinney. Your lordship sees that this gentleman has sold to the Caoutchouc Company what he considers to be the patented invention, and therefore he is endeavoring to support the engagement he has entered into with the Caoutchouc Company ; and as long as he can give any color to the existence of this, he will do it.

Lord LANGDALE, M. R. If he does not bring any action you can apply. Whatever my opinion might be, it will not save you from action.

Tinney. No, my lord, certainly ; but it will be a considerable satisfaction to us to have the present motion dismissed and the injunction refused.

Lord LANGDALE, M. R. I do not intend to grant the injunction.

Pemberton. We have filed affidavits in answer. Mr. Woodcock reasserts positively what he has before sworn, and we have the affidavit of Mr. Farey, a gentleman of great intelligence and knowledge on scientific subjects, and whose affidavit at least is a full counterbalance to Dr. Andrew Ure's, who goes through the whole of the matter, and who states his opinion of the importance of the invention, and who answers the objections, as far as one scientific gentleman can dispose of the opinions of another scientific gentleman ; with respect to the validity of the specification, it is not a matter for either of them to deal with. He states, as to the objections which have been made by these parties, that they cannot tell what the particular object of the invention is ; he states that he has no difficulty whatever, and with respect to the notion of this being an invention for the purpose of cutting ivory and glass, and other things of that nature, it is quite absurd. The invention is an invention for cutting india-rubber and other similar substances, which can be cut into bands and tapes and fillets, and not for cutting ivory and glass. Mr. Farey then states various other objections which have been taken by Dr. Ure ; he disposes of them in a manner satisfactory. Those objections, which are objections in point of law, are matters which have to be tried at law. The first is a point of fact in the affidavit of Mr. Woodcock, and against that there is the affidavit of Mr. Nickels, the defendant, and Mr. Benjamin Nickels, his brother, and it will be for a jury to decide between them on that fact. A court of law is more competent to dispose of these matters than a court of equity on the legal validity of the specification and patent, and if we find that the patent is invalid, what is the consequence ? Why, our bill will be dismissed with costs, and the present motion will also be dismissed with costs. Suppose we succeed, and this is dismissed now, we shall be in the position of having had our motion refused, and with costs ; and it will be on evidence which, after the trial, may turn out to be wholly false. Therefore I take nothing more than in any case we may be entitled to, and I submit to those terms which have been suggested—at least by the court—that the motion

stand over, we undertaking to bring an action ; if we do not bring the action, then this motion will be dismissed with costs ; and if we do bring the action, we must abide by that action, whether we succeed or not.

Toriano. My lord, I am with Mr. Pemberton, and in consequence of the affidavits of Messrs. Nickels and Keene, Mr. Woodcock has filed another affidavit, in which he reiterates the assertions in his first affidavit, and also exposes the fallacy of some parts of the affidavits of Messrs. Nickels and Keene.

Tinney. I think the court will be saved a great deal of trouble by disposing now of this motion.

Lord LANGDALE, M. R. You are of opinion, Mr. Tinney, and therefore argue, that when it is a mere legal question, which it is, as to the validity of the patent, and the plaintiff undertakes to bring an action, which is to be decided at law, that I ought to make an order, which is to be determined here first.

Tinney. I thought the Court of Equity would not entertain any jurisdiction to prevent a person having his legal rights ; but if there is anything which in the least degree inconveniences or prejudices the other party, you have a right to show that he has not made out either a *prima facie* case as to his legal right, or, if he had made out a *prima facie* case as to his legal right on the face of his patent, still we have a right to show that the case is entirely disproved, because the invention is not new, and that his own conduct has been such that he ought not to call upon the court to give him the least degree of assistance, or to do anything which will prejudice the defendants. I believe I am prepared to show that there is not a *prima facie* case, and that there is not the least case as to the invention being new ; it was an old invention, and therefore there is no case ; and the conduct of the party has been such as not to entitle him to call upon the court for any relief at all by way of injunction.

Lord LANGDALE, M. R. You need not trouble yourself upon that, because on the statements which have been made to me and the evidence which has been read I should

not think fit to grant the injunction ; neither do I think fit to put you to the inconvenience of an account ; and further, if they did not undertake to bring the action, I should have refused the motion, with costs, in the way it stands ; but if they do undertake to bring an action, the question is whether I am to prejudice that action by dismissing this motion. If they do not bring the action, you will apply for the costs of the motion and the costs of the suit, and everything else ; if they do bring the action, as they undertake to do, it will be determined at law. It ought to be done without delay.

Injunction retained.

Re DOWNTON'S PATENT.

Privy Council, June 13, 1839.

(1 Web. P. C. 565.)

Requisites for Extension. Grantee of New Patent. Costs.

Upon an application for the extension of the term of letters patent, the questions are, is it a useful invention ; is it beneficial to the public ; is it an invention of that character which would lead us to interpose ; is there ingenuity in the invention, and has the party been remunerated ?

The sale of a patented article in considerable numbers, when its cost is three or four times as great as the common article, is strong evidence of utility.

An extension granted to the administratrix of the patentee.

Costs given to the petitioner where there was no ground for the opposition.

Application for extension.

The application was made by Betsy Downton, widow and administratrix of J. Downton, to whom letters patent had been granted June 18, 1825, numbered 5,187, for "improvements in water-closets."

The petition, after stating the invention and the grant of the letters patent, further stated that the patentee encountered many difficulties, principally arising from his want of capital and connection, he being a foreman shipwright.

That he spent all his small capital in taking out the patent, and could not work the invention, until in 1827 he succeeded in borrowing £550 at £5 per cent. That from various causes, and the expenses of a large family, the patentee died in debt, to the amount of £2,000 ; that the creditors released his estate on receiving a payment of 8s. in the pound. That the profits arising from the gradually increasing sale of the patent article had been interfered with by infringements both prior and subsequent to the death of the patentee, and that the petitioner had not the means to defend the patent ; but that the invention is now appreciated, and if the term be extended the petitioner would be enabled to support her family, and derive some profits from the invention.

The application was opposed, and the grounds of opposition stated in the notice of objections were, the high price at which the articles had been charged ; that the patentee would not allow the trade any advantage ; that the want of capital being alleged as the cause why the invention was not introduced, the petitioner did not appear to be in any better position than the patentee had been.

Hill and *Roe buck* appeared in support of the petition, and *Wakefield* for the opponents.

The invention was proved to be very useful for ships, in which it is necessary to get rid of the foul air and other contents of the water-closet below the level of the water. The patentee had sold the patent closet at £15 ; the cost of the labor and materials would be £11 ; allowing twenty-five per cent. for the employment of capital, the cost became £13 10s., and £1 10s. remained for patent right.

It appeared that 920 had been sold ; that the invention was opposed by the trade ; and that the amount of gross sales amounted to £14,622, being an average of £1,000 a year, and £250 a year for the profits. The cost of experiments, and of the letters patent, and of necessary tools was not less than from £500 to £600, and much labor and time were expended upon them. One of the creditors, who had received 8s. in the pound, on a debt of £1,173, was called to speak to the character of the inventor and the circumstance

of his insolvency ; and he stated that the inventor had raised himself wholly by his industry, and brought up a family of ten children. The remuneration received during twelve years was from £200 to £250 per annum, which sum included the profit on capital, and the remuneration for superintendence and loss of time, and the patent right.

A LORD. We assume that an article which may be placed below the water-line must be useful, and the fact of 924 being sold, when it costs three or four times as much as the common article, is very strong evidence, unless that is false testimony.

Wakefield, for the opponents. The case made out has nothing to do with the extension of the patent ; it may be a good case for alms to Mrs. Downton and her family. Mr. Downton has had the usual term of the patent ; and from the want of capital, or some other cause, he has made little by it. I understand patents to have been usually extended on the grounds that such extension would be beneficial to the public.

A LORD. When a party has shown great ingenuity in an invention, and, from want of capital and means, has not been able to obtain an adequate return, we have over and over again extended the patent under such circumstances. The evidence is that more than £200 a year has been received, but part of that £200 a year consists of the profit upon capital. If it is a mode of advantageously employing capital, it is an additional reward for the invention. The questions are, is it a useful invention ; is it beneficial to the public ; is it an invention of that character which would lead us to interpose ; is there ingenuity in the invention, and has the party been remunerated ? My doubt is this. It appears, Mr. Hill, you would make £200 a year. The testimony of the respectable witness Mr. Nairn went to show (and the rest of the evidence is consistent with it) that if you go on you will get £200 a year. Then if that has been the usual average profit during the fourteen years of the patent, or say ten or twelve years, since it has come into use, and you have been able to overcome the opposition of the plumbers, is not this the ordinary case ; and

would it be just for the party at the end of the fourteen years to come and say, "I have only made £200 a year; I want to make the same sum so many years more." We generally want this proof—that they made nothing for the first seven or eight years, and it only began to be profitable during the latter years. It is no case for an extension only to show that you made £200 a year for the first fourteen years, and you want to make £200 a year for seven years more. That I take to be the objection.

Hill. I do not divide the 924 over the fourteen years. In point of fact the sale is increasing: I have here a list of the number sold in each year. It appears that in 1825, 19 closets were sold; in 1826, 33; in 1827, 90; in 1828, 92; in 1829, 32; in 1830, 44; in 1831, 46; in 1832, 63; in 1833, 74; in 1834, 84; in 1835, 113. I can explain the small number in 1829 by a piracy at that time; and it went on increasing from 1829 till 1835, when the patentee died. In 1836, 73 closets were sold; in 1837, 70; in 1838, 69; in 1839, 22.

Lord LYNDHURST. [*Lord BROUGHAM, Sir H. JENNER and Dr. LUSHINGTON also sat.*] Their lordships are of opinion that the term of the patent should be extended for five years, and will report to Her Majesty accordingly.

Roe buck applied for the extra costs occasioned by the opposition.

A LORD. I think so in such a case as this; there was no ground for the opposition. The Attorney-General is here for the public at all events.

Webster says: The court ordered it to be referred to a master of the Queen's Bench to tax "all such extraordinary costs as may have been incurred on behalf of the said Betsy Downton, in consequence of the caveat and opposition." These costs were taxed at £61 10s. 1 Web. P. C. 567, *note*.

*Re KAY'S PATENT.***Privy Council, June 13, 1839.**

(1 Web. P. C. 568.)

Extension of Patent. Presumption of Validity. Effect of Subsequent Adverse Decision on Validity. Estimating Profits.

If letters patent are about to expire, an application for an extension will be heard during the pendency of legal proceedings as to the validity of the patent.

To establish a *prima facie* case of the validity of a patent is sufficient on an application for an extension.

The renewal grant of letters patent becomes invalid if, after the extension, the original patent is held to be bad.

In estimating profits the expense of taking and defending the patent and of making experiments are to be deducted.

Application for extension.

The patent had been granted to James Kay for "improved machinery for preparing and spinning flax."

Pollock and *Booth* appeared for the petitioner, *Cresswell* for the opponents, and the Attorney-General for the Crown.

Pollock, for the petitioner, in reply to a question from their lordships. The validity of the patent is disputed ; an action has been tried, and a verdict found establishing the patent ; objections have since been made in the Court of Chancery, and the case is now before the Master of Rolls for further directions.

Cresswell, opposed. Though the verdict was found for the plaintiff, a special endorsement was made on the postea ; in consequence of this the Master of the Rolls sent a case to the Court of Common Pleas, consisting of the issue, the verdict, the postea, and the specification, desiring the opinion of that court whether the patent was valid or not. That court, after argument and time to consider, returned a certificate to the Master of Rolls that it was not valid, and gave their reasons to the counsel on each side. The case has been argued before the Master of Rolls on further directions, and now stood for his lordship's judgment.

Their lordships intimated that, the case not being decided in the Court of Chancery, they felt some difficulty in proceeding, and should not do so were it not that the patent would expire in a few days ; but that this court was not to be substituted in the place of the Court of Chancery to decide the legal question.

Pollock. I need not go further than to show that there is a reasonable ground for supposing that the patent would appear to be valid, leaving to the Court of Chancery to decide upon that question.

Campbell, Attorney-General. If this were *res judicata*, and the court had decided this not to be a valid patent, I should strenuously resist a prolongation of the term ; but it being *lis pendens*, I do not conceive your lordships could be considered as deciding that, by recommending a prolongation of the patent in case it should be established.

Their lordships decided that, the patent being near its expiration they would proceed, as the prolongation would be of no value if the Court of Chancery should decide against the validity of the patent. They held that the usage of the House of Lords had been to grant an extension on the party making out a *prima facie* case, leaving the validity of the patent for the determination of the courts of law.

Several witnesses called for the petitioner testified describing the experiments made by the patentee in their connection with the novelty of the invention ; but as the validity of the patent was passed over in rendering judgment, their testimony is not important.

A LORD. The invention claimed is not for macerating flax, but for new machinery to macerate flax. It appears that the machinery has been abandoned, and some other adopted. [*Pollock.* If your lordships are inclined to entertain that question, I think you will see that if a man discovers a principle and produces the result by means of machinery, the two together form the entire invention.] I think the discovery is that by macerating flax you apply it to more advantage ; but you do not claim that as the invention ; you claim the machinery by which it is macerated, assuming that macerating was an old process, previ-

ously known ; and in asking for that, he thought he could not claim a patent for macerating. He does not claim in his patent the macerating the flax with a view to its spinning, but he only claims the new machinery—that is, a new mode of doing it. I do not infringe your patent by doing that by other machinery. [*Pollock*. That will depend upon this—whether if a man makes a discovery and gives it to the world in a particular shape, but which admits of being instantly copied by the substitution of mechanical equivalents or by the adoption of other means which are quite obvious, it is not to be protected. I apprehend the law will protect that.] Let me ask you this, Mr. Cresswell : suppose the patent to be valid ; suppose the decision had been already given in the petitioner's favor, that he was possessed of a judgment of law, either an injunction against you to restrain the pirating, or a verdict in an action, or in any other way you choose—suppose the validity is established, have you (suppose you put it upon that footing) any case against our granting an extension ? [*Cresswell*. I think I have, and if your lordships please I will state it at once.] We think, after all the consideration we can give it, we must come to the conclusion that we will not inquire into the validity of the patent ; and as our decision will not affect the decision of the Court of Chancery, we will assume for this purpose that it is a valid patent ; and then the only question would be whether this gentleman is entitled to a renewal. See the inconvenience of any other course. Suppose we were to lay down the principle and come to a decision that we would not extend the patent on the ground that it was an invalid patent, and a few days hence the Master of the Rolls should decide that it was a valid patent, we should do a great wrong ; while, on the other hand, if we assume the patent to be valid, we do no harm. [*Cresswell*. The original monopoly is sufficient.] Then we wish to know whether the original monopoly has been sufficiently remunerated. If it has been sufficiently remunerated, we shall not extend the patent ; but if it has not been remunerated, and there is ingenuity in the invention, and usefulness, and he has been almost a loser by it, there seems no

reason why it should not be extended for a time sufficient to remunerate him. [*Cresswell*. Then your lordships inform me that you will not, in deciding upon this extension, decide upon the validity of the patent.] Yes; we should have adjourned this petition if it had been possible to have had the judgment of the Master of the Rolls before the patent expired; but as we cannot do that, we should do injustice to decide against the validity of the patent; and as we cannot do that, we shall assume, for the purpose of the present question, that it is a valid patent, because our judgment will go for nothing if the judgment of the Master of the Rolls should be against it. We can do no harm by assuming the validity of the patent, and we should do irreparable injury to Mr. Kay if we do not, unless you mean to say that the invention is of no use.

Pollock. Supposing the question relative to the patent to be passed by, my case is this: Mr. Kay has certainly by experiments, whether philosophical or not, obtained a point which has induced a start in the manufacture of flax in this country which it is impossible to overstate; and it is impossible to overstate the benefit he has conferred upon the country; and he has not received an adequate remuneration. I presume Mr. Kay himself would not be heard to state what the actual result has been, but he begins with an outlay of £500—his patents cost him another £500—that is, £1,000; he is not repaid that for a great many years, and altogether he has received not more than £5,000 or £6,000 for a discovery which has actually conferred upon the country the benefit of millions, and which opens a source of national wealth and trade to which you can put no limit. [*Cresswell*. That would be a ground for a parliamentary grant.] No; it is much the safest way to reward every man of genius according to his success.

Their lordships are of opinion that the patent should be extended, but that an extension for three years will satisfy the justice of the case.

Webster says (1 P. C. 572, *note*): New letters patent were granted, but the decision of the Court of Chancery was against the validity of the patent, and that decision on appeal to the House of Lords was affirmed.

KAY v. MARSHALL.

Chancery, M. R., July 16, 1839.

(2 Carp. P. C. 165.)

Patent for Improvement. Novelty. Opinion on Feigned Issue.

The adoption of a particular length of "reach" of a machine for spinning flax, held, not a subject for a patent.

The opinion of a court of law, on issue out of Chancery, is not conclusive upon the equity court.

Hearing upon return of a certificate of opinion from a court of law.

A general sketch of this long litigation is prefixed to the report of the case in the House of Lords, *post*, June 18, 1841. The present proceeding is the hearing had before the Master of the Rolls upon the return to the Court of Chancery of the certificate of the Common Pleas, showing the opinion of that court upon the case stated.

Lord LANGDALE, M. R. This case came before me on the equity reserved upon the certificate returned by the judges of the Common Pleas, to whose consideration a case was submitted, with the question whether the plaintiff's patent was valid in point of law. The judges have certified their opinion to be that the patent is not valid in point of law, and the defendants thereupon insist that the plaintiff's bill ought to be dismissed with costs, and that the plaintiff ought also to pay the costs of the issue and of the case.

The plaintiff contends that the opinion of the judges is erroneous, and that I ought either to give relief, notwithstanding their certificate, or to put the question relating to the validity of the patent into some further course of inquiry.

The question with me is the same as that which was before the judges, and though I have the aid of their opinion, and by their favor of the reasons which induced them to form that opinion, it is undoubtedly my duty to consider

whether, after hearing the reasons which have been advanced on both sides, it is an opinion satisfactory to my own mind, and such as I ought to adopt. The decision to be pronounced here must rest on my responsibility and not on the responsibility of the learned judges whose assistance I have asked and received.

The patent was granted for "new and improved machinery for preparing and spinning flax, hemp and other fibrous substances by power." And in the specification the plaintiff declared the nature of his invention to consist in "new machinery for macerating flax and other similar fibrous substances previous to drawing and spinning it ; and also in improved machinery for spinning the same, after having been so prepared."

Nothing has occurred to show that the plaintiff's machinery for macerating flax previously to drawing and spinning was not new at the time when the patent was granted ; and nothing has occurred to show that previously to the grant it was known that maceration to the extent proposed by the plaintiff was not a new process by which flax was usefully prepared for drawing and spinning it ; and so far as relates to the maceration described in the patent, no mention is made as to the novelty and utility of the plaintiff's invention ; and if this were all, the validity of the patent would not be affected by the fact that before the grant a mode of preparing the flax for spinning by moistening it had been invented by Horace Hall, or that subsequently to the grant a more convenient and efficient mode of maceration had been invented and come into general use. But with respect to improved machinery for spinning, the plaintiff in his specification says, "I place the drawing rollers only two and a half inches from the retaining rollers, and this constitutes the principal improvement in the said spinning machinery ; for the roving being so completely macerated would not hold together to be drawn out while in such a state to the ordinary length of the staple ; but this very state when drawn in so short a length as here represented enables it to be spun very fine and evenly ; for it should be stated that there is no elasticity in the fibre

of flax, hemp, nettle-weed or other like substances ; but when drawn by rollers so placed as aforesaid, and moving at the relative speeds aforesaid"—which he has previously described to be eight to one—"and in the completely saturated state aforesaid, the fibres themselves are pulled asunder and require to be twisted immediately, or the continuity of the thread would be destroyed." And again in specifying his claim he declares that that which he claims as his invention in respect of improved machinery for spinning flax, hemp and other fibrous substances, is a certain trough which he has described, and the placing the drawing and retaining rollers nearer to each other than they have before been placed, say within two and a half inches of each other, for the purpose aforesaid.

From this specification it appears to have been known to the plaintiff that the fibres which were to be spun after maceration would be pulled asunder by drawing in his manner, and require to be twisted immediately to prevent the continuity of the thread being destroyed ; and therefore he placed the drawing and retaining rollers very near to each other.

He has declared that this placing of the rollers constitutes the principal improvement in the spinning machinery ; and among the things which he claims as his invention is this placing of the rollers nearer to each other, "nearer than they have been placed, say within two and a half inches, for the purpose aforesaid." And it is endorsed on the postea by the learned judge before whom the issue was tried, that "before the granting of the patent it was not known that flax could be spun by means of maceration, as having a short fibre, at a reach of two and a half inches." But in various sorts of spinning machines which were used before the granting of the patent, there were slides by which the reach was varied according to the length of the staple or fibre ; "for cotton-spinning, the reach varied from seven eighths to an inch and a quarter ; for tow-spinning, from four to nine inches ; for worsted-spinning, from five to fourteen inches ; for flax or line spinning, from fourteen to thirty-six inches ;" so that machinery by which

the reach was varied from less than an inch to thirty-six inches was known before the granting of the patent.

The plaintiff has found that a reach of two and a half inches or thereabouts is well adapted for spinning flax prepared for spinning by his process of maceration ; and the question is reduced to this—whether his adopting that particular length of reach for the purpose of applying it to the spinning of flax so prepared is to be considered an improved machinery in respect of which this patent can be held to be valid ; and I am of opinion that it cannot.

I concur entirely with the learned judges, and see no reason to think that any other result would follow from further investigation.

Being of opinion that the patent is invalid, it follows that the bill must be dismissed. I have considered the question of costs, and I think that I ought to make no order with respect to the costs of the issue ; but the plaintiff must pay the costs of this suit and of the case.

Bill dismissed.

BACON *v.* JONES.

Chancery, July 26, 1839.

(4 Mylne & C. 488.)

Practice in Equity. Retaining Injunction Bill to give Time for Proving Legal Title.

In August, 1835, a patentee filed a bill to restrain an alleged infringement of his patent, and the defendant having by his answer denied the validity of the patent, and also the fact of the alleged infringement, the plaintiff made no interlocutory application for an injunction, but went into evidence in support of his case, and in May, 1839, brought the cause to a hearing. The Master of the Rolls, being of opinion that the plaintiff upon the evidence had not made out a case which would have supported an injunction if applied for in the interlocutory stage, refused to give him an opportunity of establishing his title at law by retaining the bill with liberty to bring an action, and dismissed the bill with costs ; and the Lord Chancellor, on appeal, affirmed this decision.

Consideration of the principles and practice of the court in granting injunctions in patent cases upon interlocutory motions and at the hearing.

Appeal from order dismissing bill for injunction.

This suit was instituted in August, 1835, to establish the plaintiff's exclusive right to a patent for the manufacture of a gas-lamp burner of an improved construction, called "the patent double cone gas-burner." The bill alleged that from the time of granting the letters patent, which were dated July 2, 1829, until the acts of infringement complained of, the plaintiffs, or those under whom they claimed, had been in the sole and undisturbed enjoyment of the patent right; but that the defendants had recently infringed the patent by manufacturing and selling gas-burners constructed on the same principle, and which were counterfeits or imitations of the gas-burners of the plaintiffs; and it prayed that the defendants might account for the profits which they had made by the sale of burners so piratically manufactured, and might be perpetually restrained by injunction from infringing the patent in future.

After the bill was on the file, the plaintiffs did not apply for any interlocutory injunction; but upon the answers coming in, denying the validity of the patent and the fact of the alleged infringement, they filed a replication and went into evidence to prove the originality and usefulness of the patent invention, and the acts of alleged piracy with which they sought to fix the defendants. They afterward brought on the cause to a hearing, when the Master of the Rolls made a decree dismissing the bill with costs.

The plaintiffs now appealed against that decree.

The nature of the invention and the particular circumstances of the case are stated in detail in the report of *Bacon v. Spottiswoode, ante*, May 4, 1839.

Richards, Parker and Johnes for the appeal.

Wigram and Simons in support of the decree.

Upon the argument of the appeal, three questions were made: 1. Whether the patent, being for a principle, was not void upon that ground; 2. Assuming the patent to be good, whether there had in fact been any infringement, the burner of the defendants being, as was contended, of a totally different construction from that of the plaintiffs; 3. Whether the plaintiffs, by omitting for the four years during which their bill was on the file to apply for an inter-

locutory injunction, had not absolutely deprived themselves of the right to ask for relief at the hearing, it being contended that the injunction could only proceed upon the foundation of a legal title, which title had not yet been established, and that an account was only given as incident and consequential to the injunction. With reference to the third point, upon which the Lord Chancellor's judgment entirely turned, the following cases were referred to : Jesus College *v.* Bloome, 3 Atk. 262 ; Smith *v.* Cooke, *id.* 378 ; Turner *v.* Winter, 1 *ante*, 43 ; The Universities of Oxford and Cambridge *v.* Richardson, 6 Ves. 689 ; Baskett *v.* Parsons, *id.* 699 ; Barry *v.* Barry, 1 J. & W. 651 ; Baily *v.* Taylor, 1 Russ. & Mylne, 73 ; Crosley *v.* The Derby Gas-light Company, 2 *ante*, p. 513 ; Millington *v.* Fox, 3 Mylne & Craig, 338. The plaintiffs insisted that if the evidence was not sufficiently strong to entitle them at once to a perpetual injunction, yet at all events the bill ought to be retained for a year, with liberty to bring an action at law in the mean time.

LORD COTTENHAM, L. C. The jurisdiction of this court is founded upon legal rights, the plaintiff coming into this court on the assumption that he has the legal right, and the court granting its assistance on that ground. When a party applies for the aid of the court, the application for an injunction is made either during the progress of the suit or at the hearing ; and in both cases, I apprehend, great latitude and discretion are allowed to the court in dealing with the application. When the application is for an interlocutory injunction, the court may at once grant the injunction, *simpliciter*, without more—a course which, though perfectly competent to the court, is not very likely to be taken where the defendant raises a question as to the validity of the plaintiff's title ; or it may follow the more usual, and, as I apprehend, more wholesome practice, in such a case, of either granting an injunction, and at the same time directing the plaintiff to proceed to establish his legal title, or of requiring him first to establish his title at law, and suspending the grant of the injunction until the result of the legal investigation has been ascertained, the

defendant in the mean time keeping an account. Which of these several courses ought to be taken must depend entirely upon the discretion of the court, according to the case made.

When the cause comes to the hearing, the court has also a large latitude left to it, and I am far from saying that a case may not arise in which, even at that stage, the court will be of opinion that the injunction may properly be granted without having recourse to a trial at law. Again, the court may, at the hearing, do that which is the more ordinary course ; it may retain the bill, giving the plaintiff the opportunity of first establishing his right at law. There remains a third course, the propriety of which depends on the circumstances of the case, viz., that of at once dismissing the bill.

Generally speaking, a plaintiff who brings his cause to a hearing is expected to bring it on in such a state as will enable the court to adjudicate upon it, and not in a state in which the only course open is to suspend any adjudication until the party has had an opportunity of establishing his title by proceeding before another tribunal. And I think the court would take a very improper course if it were to listen to the plaintiff who comes forward at the hearing and asks to have his title put in a train for investigation, without stating any satisfactory reason why he did not make the application at an earlier stage. When he comes forward upon an interlocutory motion the court puts the parties in the way of having their legal title investigated and ascertained ; but when a plaintiff has neglected to avail himself of the opportunity thus afforded, it becomes a mere question of discretion how far the court will assist him at the hearing, whether it will then assist him at all.

If, indeed, any circumstances had occurred to deprive him of that opportunity in the progress of the cause, the question might have been different ; but in this case I have not heard any reason suggested why the plain and ordinary course was not taken by the plaintiffs, of previously establishing their right at law. They might have brought their action before filing the bill, or they might, after the bill

was on the file, have had their right put in a train for trial. Instead of that, they have allowed the suit to remain perfectly useless to them for the last four years. They knew of the alleged infringement in the month of August, 1835 ; and from that time till the hearing there was no moment at which they might not, by applying to the court, have had liberty to bring an action to establish their title at law.

It is obvious that such a line of proceeding exposes a defendant to inconveniences which are by no means necessary for the protection of the plaintiff. It is no trifling grievance to a defendant to have a Chancery suit hanging over him for four years, in which, if the court shall so determine at the hearing, he will have to account for all the profits he has been making during the intermediate period. Is a defendant to be subject to this annoyance without any absolute necessity, or even any proportionate advantage to his adversary, and without that adversary being able to show any reason why he did not apply at an earlier time ? It appears to me that it would be very injurious to sanction such a practice, more especially when I can find no case in which the court has thought it right to retain a bill simply for the purpose of enabling a plaintiff to do that which these plaintiffs might have done at any time within the last four years.

It was much more regular and proper that the plaintiff should have taken steps for putting the legal right in a course of trial. Those steps they have not chosen to take ; and it is now impossible to put the defendants in the same position in which they would have stood if such a course had been originally adopted.

For these reasons I am of opinion that the Master of Rolls, finding that the evidence in the cause was not such as he could act upon with safety, came, in the exercise of his discretion, to a sound conclusion, when he refused to grant the injunction or retain this bill.

I have purposely abstained from saying anything as to the legal rights of the parties, because I do not think the case is in such a state as to enable me to adjudicate upon it.

The appeal must be dismissed with costs.

ELGIE *v.* WEBSTER.**Exchequer, Mich. T., 1839.**

(5 Mee. & W. 518.)

Contracts. What constitutes a Partnership.

By an agreement in writing, W. agreed with E. to advance him a sum of money for the purpose of manufacturing and perfecting certain inventions ; and it was agreed that if the inventions should become of public or private use W. should be entitled to one third of the profits of the invention. The agreement contained an express promise on the part of E. to repay the sum of money advanced by W. *Held*, in an action brought by W. to recover the money thus advanced, that this agreement did not constitute a partnership between the parties with respect to that sum.

Motion, pursuant to leave reserved, to enter a nonsuit.

This was an action of debt to recover a sum of £59, money lent, and on an account stated, to which the defendant pleaded *nunquam, indebitatus*. At the trial before Lord Abinger, C. B., at the Middlesex sittings after Trinity Term, the plaintiff rested his case on the following agreement to the following effect : “ Memorandum of an agreement made November 7, 1835, between W. Webster and G. J. Elgie. Whereas, Webster has had it in contemplation to manufacture, mature and perfect two inventions for registering of the distances of carriages travelling, and for ascertaining and registering the number of persons going into and out of omnibuses, . . . had applied to the said Elgie to advance him the moneys necessary for those purposes, and had agreed that if he accomplished the said two inventions, and they should become of public or private use, Elgie should be entitled to one third part or share of the same. And whereas accordingly Elgie had advanced Webster the sum of £59 up to this day, which he admitted and hereby promised to pay, it was therefore agreed, etc., that Elgie should be entitled to one third part and share of the two inventions and of all profits and advantages to arise and be made therefrom, independent of the payment of the sum of £59 so advanced and lent as aforesaid. And Elgie

agreed that in case the inventions or either of them should be called for and come into public use he would advance all money required for the manufacture of the same upon being allowed the repayment of such advances out of the moneys to arise and be received for the same, together with interest, before any division of the profits should take place. And it was further agreed that in case the inventions should be sold, or either of them, or any premium shall be received for them, such premium and purchase money shall be equally divided." Signed by the two parties.

It was objected on the part of the defendant that the effect of the above agreement was to constitute a partnership between the contracting parties, and consequently to prevent their suing each other in respect of the matters contained in the agreement. The jury, by the direction of the learned judge, found a verdict for the plaintiff, the defendant having leave to move to enter a nonsuit.

Godson now moved accordingly, and contended that this agreement constituted a partnership between the parties as to the sum of £59, for which the action was brought.

By the COURT. This is an agreement to pay the sum of £59 at all events, although, in consideration of that advance, the plaintiff agrees to give the defendant a share of the profits if any should arise. There might be a question whether a partnership was not created by this agreement, as to the subsequent profits and the sums of money agreed to be afterward advanced by the plaintiff for the purpose of carrying out the inventions. But the express promise to pay this specific sum at all events takes away the objection of that forming a part of any partnership fund.

Rule refused.

GILLETT v. WILBY.

Common Pleas, N. P., Mich. Vac., 1839.

(1 Web. P. C. 270; 2 Carp. P. C. 540.)

Infringement of Patent for Improvements. Legality of Patent. Experimental Use. Certificate of Validity under 5 and 6 Will. IV., c. 83, s. 3.

In a suit for infringement, the defence that the patent is illegal must be pleaded specially. Notice of the objection is not sufficient.

Though all the improvements claimed must be shown by the plaintiff to be new, an imitation of one constitutes an infringement.

Experimental use by the patentee is not prior public use.

Where the verdict was for the plaintiff on the issue raised by plea of want of novelty, *held*, that he was entitled to a certificate of validity under 5 and 6 Will. IV., c. 83, s. 3.

Trial of an action for infringement.

The plaintiffs in their declaration complained of an infringement by the defendant of a patent they had obtained December 21, 1836, for certain improvements in a cabriolet. The pleas were : 1. The general issue ; 2. That the alleged improvements were not new ; and 3. That the plaintiffs were not the true and first inventors.

The allegation in the declaration was that the defendant unlawfully, etc., did use and put in practice one of the said description of vehicles called cabriolets, with the said improvements, and that the cabriolet so used by the defendant did imitate and resemble the said improvements.

The patent and specification were put in, from which it appeared that there were five different things which the plaintiffs claimed as their invention.

Ball, for the defendant, was contending that the patent was illegal.

Hill, for the plaintiffs, objected to this line of argument, on the ground that there was not an issue to which it could apply.

COLTMAN, J. If such a defence were intended to be relied on, it ought to have been specially pleaded.

Ball submitted that under the statute (5 and 6 Will. IV.,



FIG. 5.

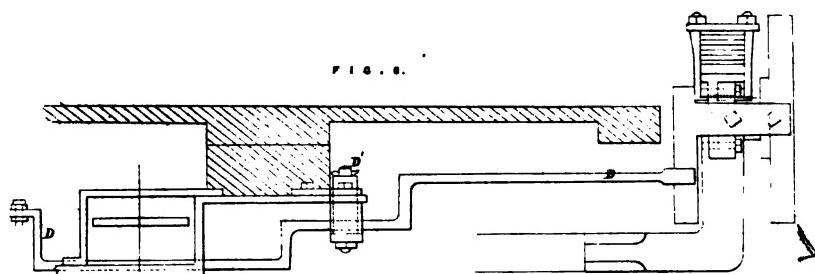


FIG. 6.

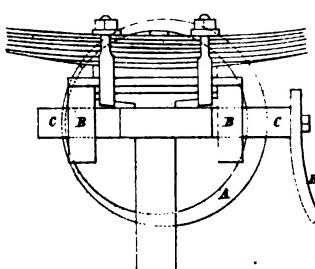


FIG. 12.

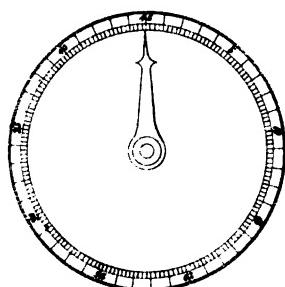
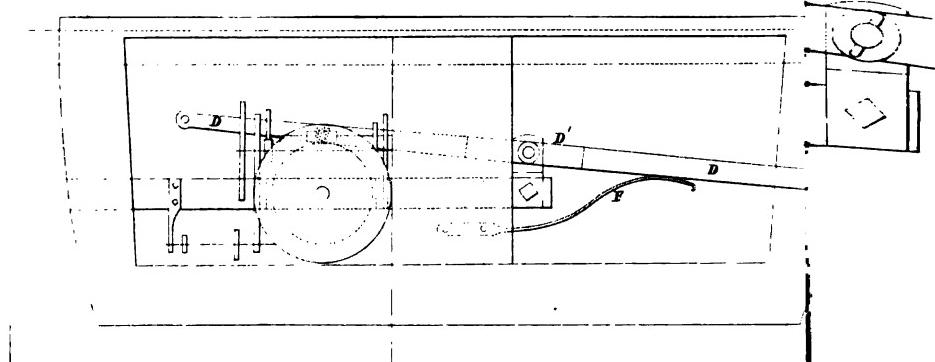
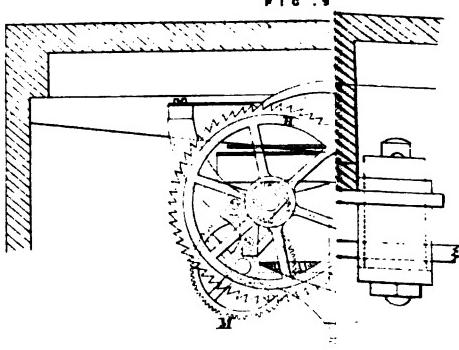
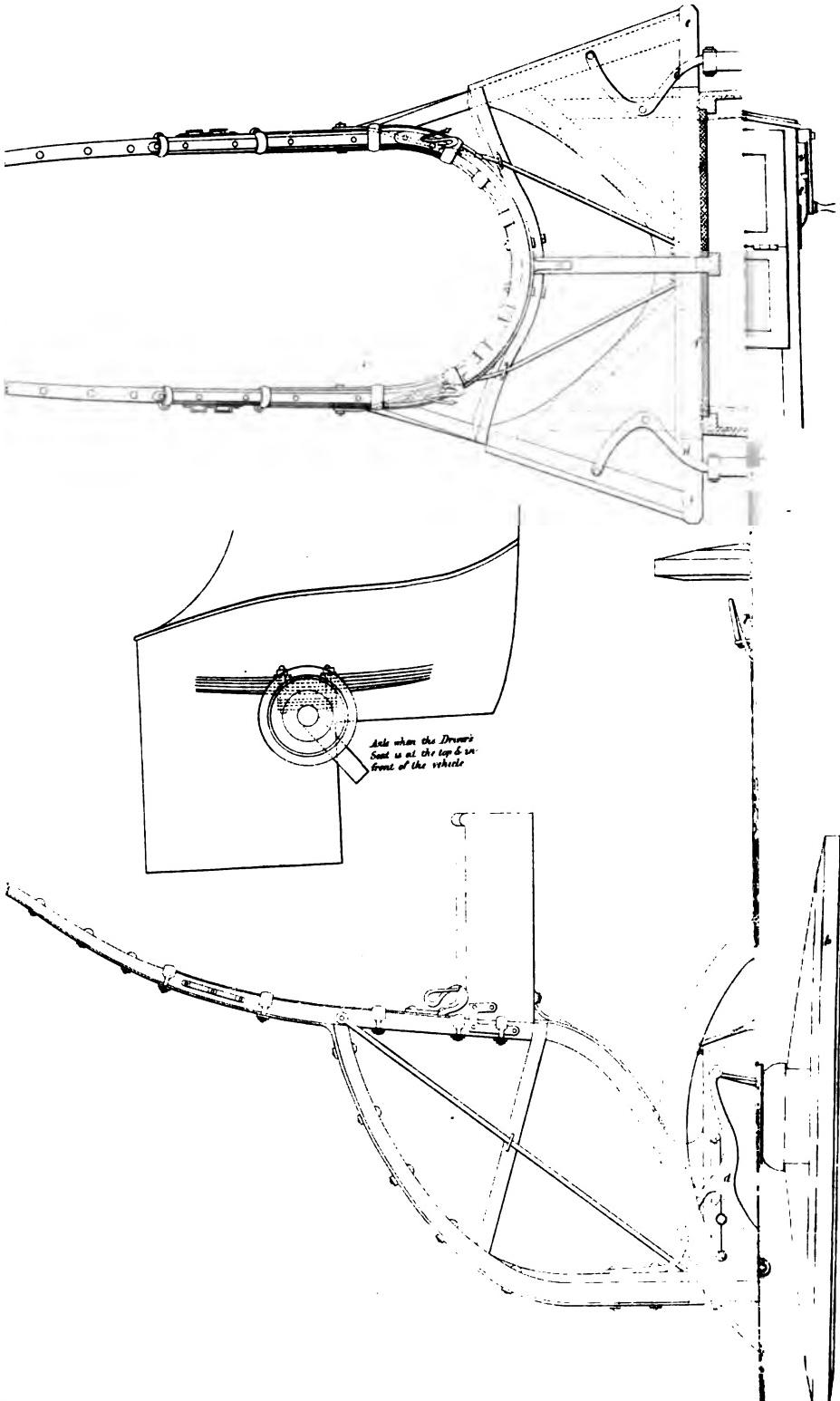


FIG. 9.



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A.D. 1836 N° 7266.

Cabs.

GILLETT AND CHAPMAN'S SPECIFICATION.

NOW KNOW YE, that in compliance with the said proviso, we, the said William Stedman Gillett and John Chapman, do hereby declare the nature of our Invention, and the manner in which same is to be performed, are fully described and ascertained in and by the following statement thereof, reference being had to the Drawings hereunto annexed, and to the figures and letters marked thereon, that is to say :—

Our Invention relates,—

First, to the application of a driving seat or box (or such like convenient support for the driver) to the back of such description of two-wheeled one-horse vehicles as are so constructed that the passengers enter in front, and suitable for cabs.

Secondly, in a mode of applying and working of a window or blind to cabs.

Thirdly, in the mode of applying a safety frame to cabs.

Fourthly, a mode of applying the springs of two-wheeled one-horse vehicles used as cabs.

Fifthly, in a mode of applying a suitable instrument to cabs, to ascertain the distance at any time gone by the cab, whereby the same may be indicated to the passenger and to the owner of the vehicle, and thus produce a check on the driver.

And in order that our Invention may be most fully under-

Gillet & Chapman's Improvements in Cabs.

stood, and readily carried into effect, we will proceed to describe the Drawings hereunto annexed.

DESCRIPTION OF THE DRAWING.

Figure 1 represents the side view of a cab having parts of our improvements applied thereto. Figure 2, a back view. Figure 3 is a plan partly in section. Figure 4 is a section of part of the body of the vehicle ; and Figure 5 shews part of a front view. In each of these Figures the said letters of reference indicate similar parts ; *a, a*, being an ordinary cranked axle ; *b, b*, wheels, which from the arrangement of the various parts we are enabled to have of large dimensions, as is shewn. *c, c*, the two side springs which are affixed to the axle, and connected to the iron standards *d*, which are affixed to the body of the vehicle and to the under or what we call the safety frame *e*, it offering a support in the event of a wheel coming off, or of a horse falling or rearing, as will readily be understood on inspecting the Drawing ; such framing also carries the shafts, and also a platform for the passengers to step on in entering the vehicle ; and it will be seen that this safety frame is (together with the shafts and body of the vehicle and driver's seat) carried by the springs. *f, f*, are two doors, which we prefer should respectively open towards the wheels, thus offering protection to the passenger in the act of entering, and prevent the dirt or mud on the wheels being touched by the clothes or dress ; and there should be suitable straps to prevent the doors opening too wide, as is well understood by carriage builders. *g* is a projecting piece of timber or framing affixed to the under part of the body of the vehicle, to which the spring *h* is affixed, as is clearly shewn in the Drawing. *i* is a small box on which the driver's feet are placed either in sitting or standing, into which may be stowed a feed of corn or hay. *j* is the driver's seat. *k, k*, are hooks, on which he can place his reins ; and *l* is a support at the front for the reins. And it should be stated that in making or constructing such a vehicle, care should

Gillet & Chapman's Improvements in Cabs.

be observed that the weight on the horse should be as little as possible, and for this purpose that the carriage should be as nearly as possible in a state of balance on the axle when the driver is in his seat ; hence when passengers are in the vehicle, they sitting directly over the axle, will not materially alter the balance, hence the horse will not have to bear much weight on his back, which is important in such vehicles as cabs, which are required to go at considerable speed. l , l' , are steps for the driver to his seat. By this application of means of driving from behind, the front of the cab is left open, and the view from within is uninterrupted ; in addition to which passengers may enter and leave the cabs with greater facility than when the driver's box was at the top, and the feet of the driver descending in front of the passengers, which is a construction of carriage now in general use. m is an opening in the head or upper part of the body of the vehicles, there being a door or cover, by which means the driver can conveniently communicate with the passengers, or the passengers with the drivers. We would remark, that although we have shewn an arrangement of axle, wheels, springs, shafts, and body of a carriage, and such an one as we consider the most suitable for the purposes of a cab, at the same time we do not confine our Invention to the use of such combination, as variations may be made, neither do we claim the same when uncombined with parts constituting our Invention. n , o , are two glazed frames or windows, the upper one n moving on suitable axes at each side of the body of the vehicle, as is clearly shewn ; on one end there is affixed a cranked handle, by which the driver can from without give motion to the glazed frames n , o , to open or close it. The frames n , o , are hinged together, as is shewn in the Drawing, they are therefore capable of folding up. p is a curved inclined plane, one on each side of the body of the carriage, against which the projection q of the frame o rests when down, and in the operation of folding the frames the projections q slide along the curved inclined planes till such time as the

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arms r , which are affixed to the frame o , come in contact with the curved surfaces s , fixed at the top of the carriage, but on the inside. By this means, when the handle is moved in the direction of the arrow, the frames n, o , will fold up within the carriage, and will be retained in such position by the stud t on the crank, being held by the spring catch v , or by any other suitable catch, and the passenger will also be able to open or close the frames n, o , from within, as the catch, although suitable to hold the crank handle from moving, will readily give way when the hand is applied to the frame o by the passenger within, or to the crank handle by the driver from without. In combining the safety frame and mode of entrance in front for passengers suspended on springs in combination with the body of the carriage, having the driver's seat on the top and at the front of the vehicle, in contradistinction to the mode of applying such frame to the axle as now employed, and only suspending the body of the carriage of springs, with the driver's seat on the top and in front thereof, it will be desirable to have the carriage in a state of balance on its axle, as is described when the driver is behind ; in order to accomplish this object, the cranked axle is to be so formed that the springs may be horizontal, and the cranked axle stand off at an angle, as is shewn in the Drawing ; and in whatever way the axle is arranged, whether vertically, as when driving from behind, or at an angle when driving from a seat in front, and at or near the top of the vehicle, the springs are to be so arranged that the side springs and back springs are above the passenger's seat, as is shewn in the Drawing, by which ease and comfort will be obtained to the passenger ; and such mode of placing the three springs forms one feature of novelty in cabs.

We will now describe the fifth part of our Invention, which, as before stated, relates to a mode of applying an instrument to cabs for measuring the distance passed over. Figure 6 shews a back view of part of a cab axle, and the nave of a wheel, to which are applied part of the apparatus

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for giving motion to a series or train of wheels on the movements of the wheels of the cab along the road. Figure 7 is a plan of Figure 6. Figure 8 is a section of the axle and parts of the apparatus. Figure 9 is a section of the seat on which passengers sit, the instrument for measuring distance being under the same. Figure 10 is a section of the passenger's seat, looking from behind. Figure 11, plan of the instrument for measuring ; its position under the seat of the passenger is more clearly seen in Figure 7. Figure 12 shews the graduated face of the instrument, on which is indicated the distance gone ; the whole of this instrument is placed under the passenger's seat, and is to be inclosed, that the driver cannot interfere with the apparatus.

This apparatus consists of a train of wheels as is well understood, and is clearly represented in the Drawing, and form no part of our Invention, which relates only to the mode of actuating the same by the motion or travelling of the cab, notwithstanding the varying distances at which the body of the vehicle, and consequently the seat of the passenger, may be in respect to the axle of the wheels of the cabs, owing to the play on the springs. On the nave of one of the wheels is affixed an eccentric A, which also constitutes one of the hoops of that nave. B, B, are brackets which are affixed to the axle and side spring of the vehicle. C is a sliding bar which is bent at the two ends so as at all times to touch and be worked by the eccentric A, and the bar is further bent in order to be out of the way of the cranked axle of the vehicle. It will readily be seen that in the revolution of the wheel of the cab the bar C will be slide to and fro, and by the means hereafter described such motion is communicated to the train of wheels for measuring the distance gone by the cab. D is a lever moving on a fulcrum at D'. This lever is forked at its end, as is shewn at Figure 7, and embraces the curved plate E affixed to the bar C, such plate being curved in order to allow for the lengthening of the spring when pressed down.

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F is a spring which at all times presses the lever D to its work. At the other end of the lever is attached by a pin joint the connecting rod G, which at the other end is attached by a pin joint to the arm on the axis or spindle H, moving in suitable bearings. I is another arm affixed to the spindle H, and on the end of such arm I is formed the plate J, which is formed into an inclined plane and the arc of a circle (by which means, notwithstanding the varying distances of the axle and the instrument for measuring, the parts will work correctly), which, acting under the cranked end of the driver K, moves the ratchet wheel L, of sixty teeth, one tooth for each revolution of the wheel on the road, the cab wheels being five feet in diameter, on the axis of which ratchet wheel is affixed a pinion of twenty teeth, which takes into and drives the wheel M, of fifty-six teeth. On the axle of the wheel M is affixed the screw N, which takes into and drives the wheel O, of ninety teeth, and on to the axis of the wheel O is affixed the hand of the dial or graduated face, which is graduated to measure forty-five miles. The bearing and mode of fixing of the same being clearly shown in the Drawing, no further description will be necessary.

In case it be desired to have a dial to be seen by the passenger, we apply the following additional apparatus :—On the axle of the wheel M is affixed a cam P, which in its revolution actuates the lever Q, moving on a fulcrum at Q', and to the other end of the lever Q is attached by a pin joint the connecting rod R, which will require to be bent, in order to lie within a tube at the back of the carriage, and under the lining thereof ; this rod R, at the other end, is attached to the axle of a double lever driver S, by means of an arm which is affixed to and projects from such axle of the lever driver, the axle moving in suitable bearings, as is clearly shown in the Drawing ; hence the up and down movement communicated by the rod R will cause the lever drivers S to move and alternately act on the teeth of the wheel T, which is on the axle V, and W is a ratchet wheel

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affixed to the wheel T, and moves therewith ; there being clicks or catches X will prevent the ratchet wheel moving in more than one direction ; these clicks or catches are affixed to the axis V, and are capable of moving therewith (such motion being obtained by the friction of the wheels T, W, against the wheel carrying the clicks), whilst the wheels T, W, can move independent of the axle, they being actuated by the progress of the vehicle. Y is a dial or face within view of the passenger, but to be enclosed in a glazed frame so as not to be touched. The dial or face Y is affixed to the axle D, and can be moved therewith, but in such movement the wheels T and W are retained by the lever driver, and at the same time the face or dial Y can only be turned back in order when a passenger gets in to set the pointer at zero, the clicks or catches and the lever drivers preventing the dial being turned forward ; hence the passenger cannot be cheated by the driver as to the distance gone. Z is a face or dial towards the driver, there being a handle and pointer affixed to the axle V for the driver to set the dials at zero at starting with a passenger, and there is a stop shown in the Drawing to prevent the driver forcing the dials back beyond zero. The dials, it will be seen, are graduated for ten miles. It will be evident that where the cab wheels are of large or less diameter, allowance must be made in the train of wheels to measure the distance gone by the horse ; and we would remark, that variations may be made in the arrangement of the parts without departing from our Invention, which relates to the mode of combining the parts which actuate the train of wheels correctly notwithstanding the varying distances between the axle and the position in which the measuring instrument is placed.

Having thus described the nature of our Invention, we would have it understood that we do not claim any of the parts separately nor combined other than is herein particularly described and claimed as of our Invention ; and we do claim,—

First, the application of a driving seat or box (or such

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like convenient support for the driver) to the back of such description of two-wheeled one-horse vehicles as are so constructed that the passengers enter in front, and suitable for cabs as above described.

Secondly, we claim the mode of applying and working of a window or blind to cabs from the outside, as above described.

Thirdly, the applying a safety frame and platform (by which the passengers enter in front) on springs when the driver's seat is placed either at the back or on the top, and in front, as above described. But we do not claim the application of such safety frame and platform when not placed together with the body of the vehicle on springs ; neither do we claim the application of the platform by which the passengers enter in front when on springs when driven from a seat at the side as has been done in a cab before.

Fourthly, the mode of applying the side and back springs of cabs, whereby the passenger's seat is below the position of the springs, as above described.

Fifthly, the mode of communicating the motion of the whole of a cab to a suitable train of wheelwork for measuring the distance gone, as above described.

In witness whereof, we, the said William Stedman Gillett and John Chapman, have hereunto set our hands and seals, this Twenty-first day of June, in the year of our Lord One thousand eight hundred and thirty-seven.

W. S. GILLETT. (L.S.)
JOHN CHAPMAN. (L.S.)

c. 83, s. 5) it was sufficient to have given the notice of the objection, which the defendant in this case had done.

COLTMAN, J. That is not sufficient.

Ball then contended that the plaintiffs must show, under the words of the declaration, that the defendant's cabriolet imitated and resembled all the improvements.

COLTMAN, J. It will be sufficient if it resembled any one of them. The statement is divisible.

Ball. *Morgan v. Seaward* (2 *ante*, p. 263), held that if a patent be for several improvements, and the jury find one of them not to be such, the patent is void altogether. I contend that every part must be new, or it is void altogether.

The evidence is stated in the summing up of the court.

COLTMAN, J. The defendant's first plea is that he is not guilty of the infringement—that is to say, he did not use a cabriolet made on the principle of the plaintiffs', which was an infringement of the patent right of the party ; and that involves two questions : 1. Whether what is produced before you was used by Mr. Wilby, and 2. Whether it is an infringement of the rights of the patentees. He secondly alleges that the invention was not new ; and, thirdly, that the plaintiffs are not the first and true inventors.

As regards the first point, the plaintiffs put in the patent and specification which have been read to you, and which it is as well to advert to, to see what they claim as their invention. They claim, "First, the application of a driving seat or box (or such-like convenient support for the driver) to the back of such description of two-wheeled one-horse vehicles as are so constructed that the passengers enter in front." They do not claim as their invention that they merely put the driver behind, but they put him behind, while, at the same time, there is accommodation and convenience for the passenger to enter the cabriolet in front and not behind. The second mode which they claim as new is the mode of applying the German shutter or blind to the outside. Now, the third mode they claim as being new is "the applying a safety frame and platform (by which the passengers enter in front) on springs, when the

driver's seat is placed either at the back or on the top and in front, as above described ;" that is to say, the applying of a sort of frame or platform, by which the passengers enter in front and not behind—that they claim also as being new in its combination. Then they proceed to explain what they do not claim. "We do not claim the application of such safety frame and platform when not placed, together with the body of the vehicle, on springs ;" therefore they say, as far as a carriage of that description is used, the only novelty they claim is that the frame is on springs ; and then they say, "Neither do we claim the application of the platform by which the passengers enter in front, when driven from the seat at the side." Therefore in their explanation they exclude two other descriptions of carriages, which they do not claim as part of their patent, as a novelty, except applying the frame upon springs. "The mode of applying the side and back springs of cabs, whereby the passengers' seat is below the position of the springs, as above described ;" that is the next part, and that is the fourth point that they claim ; that, they say, has never been done before. And fifthly, "The mode of communicating the motion of the wheel of a cab to a suitable train of wheel-work for measuring the distance gone." Now, these are what they claim as being new ; and it is undoubtedly true, as the counsel has just told you, that each of these matters which they claim as new must be made out to your mind to be new, and, if so, the defendant is not entitled to use them at all ; and if you should be of opinion that they are new, and some of them not new, it is no defence if he takes any part of it, for he is liable ; because if the patent is new, the party is entitled to the benefit of all and every part of it ; therefore if the defendant has taken any part of that which the patentees have a title to, the action would lie ; but you must be of opinion that each of the five articles they claim are new. Now, as to the last point, whether in point of fact the defendant has made use of the cabriolet in question ; that depends upon the testimony of two witnesses—namely, Henry Haynes and Hugh Mallett.

Mr. Haynes's evidence is that he went to Seymour Yard, Portman Street, Bryanston Square, about October 4; that he saw a cabriolet come out of the yard, which is the same as the model before you. He says, "It had no platform; I watched it to New Street Mews, Dorset Street. I saw it leave the Mews about seven o'clock, and it went back to Seymour Yard." He says, "I went the next morning there. I saw the cabriolet come out. Wilby, that is the defendant, has a stable and coach-houses in Seymour Yard, and I followed it to Hyde Park Corner," and he there got into the cab; and then he gives us a detail of what passed in the course of the day. Now, that is the evidence as far as he goes, namely, that this cabriolet came out of Seymour Yard, in which yard the defendant has a stable and coach-house, and that the name of Wilby was on the cabriolet in question.

Then Hugh Mallett also speaks to these particulars, and his evidence is material upon this point of the case, because he is acquainted with Wilby; and he informs us that Wilby had the premises spoken of by last witness. He says, "I live in Well Street Yard, Seymour Place; the defendant has premises in Seymour Yard;" he says "he used to keep a cabriolet, and the model seems like it." Then he says, "The model, which seems to have been taken from the cabriolet hired on October 5, is very like Wilby's cabriolet." Then he says, "I told Wilby one day I heard them say in York Mews that they were going to watch him out on that day, and I advised him to keep it in, and he told me he should not keep it in for any one." He appears to have been a person keeping several men at work, and occasionally working for the Patent Safety Company. That is the whole of the evidence applicable to this point of the case; and you must be satisfied whether this cabriolet was used by Mr. Wilby or by his authority. It is not necessary for the determining of that question that he should have driven it himself; if he lets it out it comes to the same thing—if he gets the profits of it. Then it is necessary to identify the model before you as being a representation of the cabriolet that came out of this yard on the

morning in question, and for that purpose Haynes tells you that on October 4 he endeavored to hire it, but could not succeed, but on the 5th he did, and took it first to Hyde Park Corner, afterward to Mr. Duncan, the solicitor in the cause, and from thence it is traced to the office of the Patent Safety Company ; it is taken by him to the place where the Patent Office is held, and there a drawing was taken of it and twice copied, and from that drawing the model before you is taken, as being the model of the defendant's cabriolet ; and that cabriolet he states to be correct, agreeing with the drawing taken. Now there is nothing else in his evidence that is very material. However, in the course of cross-examination he was asked whether there were not cabriolets driving about town marked "Hansom's Patent Safety" cabriolets, with a seat behind, and that appears to be true that there are, and in truth it appears that they had a number of cabriolets prepared to be launched according to Hansom's patent safety cabriolets, and they did not think it necessary, when they adapted it to a new machinery, to strike out the name of Hansom's patent cabs. He also proves, which is relied upon here by the gentleman who appears for the defendant, there was another cabriolet which was sent out before the time when the patent issued, in December, 1836 ; upon one occasion it was what he calls an experimental cabriolet, not then in a fit state to go out ; but they were experimentalizing, and probably for the purpose of some invention of this nature—that is, before the time when the patent was taken out, it was sent out for about twenty minutes. It is quite trifling to suppose that it can at all diminish the claim of the party who sent out the cabriolet when the invention was completed, that that should be supposed not to be new because he had made an experiment of this sort ; for the invention could not be perfected without experiments, and they do not at all detract from the claim of the plaintiffs ; and in truth the principal point for your consideration is the evidence of the different engineers, who have been called to satisfy your minds that this cabriolet, sent out by the defendant, is an infringement of the original invention of the patent cabriolets, and that

it is a new and useful invention. Now upon that subject Mr. Carpmael states—he is a civil engineer, and engaged in patents, and has compared the two models—he never had heard of the plaintiffs' invention before the patent. These two models, he says, are made very well indeed. The defendant's model is on the principle of the patent. Then the model was handed up to him, and he explained how the thing stood. He says there is a great advantage in putting the driver's seat behind as compared with others which have existed, and which were, in fact, the cabriolets used formerly ; he says there is an advantage in putting the driver on the seat behind instead of the side or the front. In the one case, with the seat at the side, the driver was obliged to leave his horse to go down to assist the passenger out, and the horse has very often started off. With regard to the seat in front, the driver was in a very dangerous situation, and it was highly disagreeable to passengers because of the dirt splashing in their face. What you have to try is whether the invention is new upon this part of the case. This witness says, in Adam's patent there is a seat behind, but at the same time the passenger gets in behind. It is with a view apparently to this circumstance they claim the application of the driving seat or box, so constructed that the passenger enters in front, because if they had claimed it generally with respect to the driving seat behind, Adam's patent had that before, and that would not have been new ; but the novelty, as witness alleges, is having the driving seat behind, and the *fare* gets in in front. He says if the passenger gets in behind, you cannot apply the spring frame so conveniently as upon this plan. He says, heretofore when such a frame was used it formed part of the framing of the axle, so that it all formed one solid frame. That is with a view to the third point that is mentioned—namely, “the applying a safety frame and platform (by which the passengers enter in front), upon springs, where the driver's seat is placed either at the back or on the top, and in front, as above described.” It is not new having a safety frame like this, but the novelty is, and which is claimed by the patent, that instead of forming one solid

work, it is placed upon springs, and the consequence, he says, is there would be a direct jar to the horse. He says the making of safety springs, in conjunction with the seat behind, is the essence of that part of the invention ; therefore they were obliged to limit the invention, so as not to claim that invention which had formerly existed, of having the safety frame on springs, when the seat was by the side of the driver. That was done before, and if they had claimed it, it would not be new ; and therefore they limit the claim as to the novelty by applying it to springs, when the driver's seat is either at the top or behind. He says the seat of the passenger is below the point of suspension, by which greater ease is attained ; passengers can get in and out without the driver descending ; and the door opens conveniently at the back, so that it protects the passengers getting in. He says the mode by which the shutter is applied is a new and useful contrivance ; so is the odometer useful ; it shows how far the cab has gone. He says the odometer is not new, but only the mode of applying it to a carriage body on springs is new ; therefore it would not have done to have claimed that as new, therefore what is claimed is "the mode of communicating the motion of the wheel of the cabriolet to a suitable train of wheel-work for measuring the distance gone, as above described." He says, I have compared Wilby's cabriolet with the patent cab ; he says it is an infringement ; the only difference is the absence of the odometer and the blind ; but the safety frame is wholly on the principle of the cabriolet, but is not so efficient as in the patent cabriolet. In point of fact, the point of infringement, according to their witness' statement, is the application of the driving seat or box to the back of the cab, and the safety frame. It appears to be the case in both carriages that the seat is behind, and the passenger can enter them in front. Secondly, they apply the safety frame upon springs, when the driver's seat is placed either before or behind. The third point of infringement is "the mode of applying the side and back springs of cabs, whereby the passenger's seat is below the position of the springs, as above described." Now he says the only

substantial difference is the absence of the odometer and the blind ; the frame is not so good ; forward it is the same, but backward it does not extend so far back ; he says the seat behind is the same sort of seat that you see for the guard of a mail coach ; that is not a driver's seat, and it requires considerable mechanical skill to construct such a cabriolet as has been done in this case. Then Mr. Cottam is called, and his evidence in substance is the same ; and I am not aware that reading it will assist you much. There have been also called before you three coachmakers—namely, Mr. Tilbury, Mr. Haughton and Mr. Rackham, who all agree they have seen no cabriolet like this, with the exception of Hansom's patent safety cabriolet, which they consider has a resemblance to this cabriolet ; but the engineers say it differs in some particulars—namely, it is not upon springs ; and it was also different in this respect, that the point of suspension was more above the line of attraction. Now you will perhaps like to have the points you will have to determine before you. If you wish to look at them, there are five different points which the parties claim as being new ; and if you are of opinion that they have established that they are new, then that part of the case is made out, and the verdict ought to be for the plaintiffs. As to the plea that they were not the first inventors, there is no evidence produced before you to show they were not, and they have got the patent ; and the remaining point for your consideration is, whether you are satisfied that Mr. Wilby used a cabriolet of this description, which is alleged to be an infringement of the patent of the plaintiffs. If he infringed any part of that which the party claims as new, that is an infringement, though he does not take the whole of it.

Verdict for plaintiffs.

Hill applied for a certificate under the 5 and 6 Will. IV., c. 83, s. 3, in that the validity of the patent came in question.

COLTMAN, J. I think you are entitled to the certificate.

Ball objected that under the pleadings he was not allowed to question the validity of the patent.

COLTMAN, J. I think the validity of the patent has in part come in question under the plea that the invention was not new, and that the plaintiffs are not the first and true inventors. But I will look into it.

The certificate was afterward granted.

The following is the entire text of section 3 above mentioned : That if any action at law or any suit in equity for an account shall be brought in respect of any alleged infringement of such letters patent heretofore or hereafter granted, or any scire facias to repeal such letters patent, and if a verdict shall pass for the patentee or his assigns, or if a final decree or decretal order shall be made for him or them upon the merits of the suit, it shall be lawful for the judge before whom such action shall be tried to certify on the record, or the judge who shall make such decree or order, to give a certificate under his hand that the validity of the patent came in question before him, which record or certificate being given in evidence in any other suit or action whatever touching such patent, if a verdict shall pass or decree or decretal order be made in favor of such patentee or his assigns, he or they shall receive treble costs in such suit or action, to be taxed at three times the taxed costs, unless the judge making such second or other decree or order, or trying such second or other action, shall certify that he ought not to have such treble costs. Stat. 5 and 6 Will. IV. (September 10, 1835), c. 88, s. 3.

COLLARD *v.* ALLISON.

Chancery, Nov. 15, 1839.

(4 Mylne & C. 487.)

Injunction. Establishing Title at Law.

Although a patent is of long standing, yet if from the nature of the alleged invention, or the conflicting evidence as to its novelty, its validity appears to be doubtful, or if the evidence of exclusive possession is not satisfactory, the court will not grant an injunction until the title has been established at law.

Renewal of motion for injunction.

The bill was filed for an injunction to restrain the alleged infringement of a patent for an improvement in the manufacture of grand square pianofortes. The patent had been obtained twelve years before.

The plaintiffs moved at the Rolls for an injunction, and filed a number of affidavits in support of the motion. The

defendants, by their answer, and by affidavits filed in opposition to the motion, admitted that if the patent was valid, the acts of infringement charged by the bill had been committed by them ; but they denied the validity of the patent, and stated facts to show that the plaintiffs had not been in the exclusive and undisturbed enjoyment of the patent right as alleged in their bill. The Master of the Rolls refused the motion, and directed the plaintiffs to bring an action in the court of Queen's Bench to try the validity of the patent ; at the same time putting the defendants upon the terms of accepting short notice of trial, and keeping an account. The plaintiffs now renewed the motion before the Lord Chancellor, by way of appeal.

Lord COTTERHAM, L. C. [After stating quite generally the nature of the apparatus constituting the alleged improvement, which the specification claimed as the subject of the patent.] It is not my intention to express any opinion upon the validity of the patent—namely, as to whether the peculiarity of construction here claimed constitutes such an improvement as would be the subject of a patent ; because I have always thought the decision of that question should devolve upon that jurisdiction in which questions of law are more properly decided. It is not my intention, therefore, to express any opinion on that point, further than to say this, that it is by no means so clear that that is a ground on which a patent could be maintained.

Independently of that circumstance, however, there is very contradictory evidence as to whether it is a novelty or not. Persons whose opinions must in their profession be held in great esteem give conflicting testimony on this point. [His lordship stated the effect of the statements on this subject contained in the affidavits on each side, and proceeded.] The effect of these contradictory statements, therefore, as the matter now stands, leaves considerable doubt upon the question whether that which is now claimed is a novelty or not ; and that circumstance would make it my duty to send the question to law, and prevent me from granting an injunction in the mean time.

But then it is said there is possession of the patent, and that possession of a patent for a certain length of time gives such a title as the court will protect until a trial at law can be had. And certainly, if I found that manufacturers of pianofortes had acquiesced, and that there was no doubt upon that point to which I have before referred, I should have adopted the course which Lord Eldon adopted (*Hill v. Thompson*, 1 *ante*, pp. 285, 299), and which I have followed, of protecting the right until the trial should have been had. For that purpose, however, I ought to have very satisfactory evidence of exclusive possession. Now I find here that certain manufacturers state that they abstained from making pianofortes in this manner out of respect for the plaintiffs, as having a patent ; while other manufacturers again say that they have always made them in this manner. Which of these statements is true I am not called to decide ; but the discrepancy does throw sufficient doubt on the case to prevent my interfering by injunction.

The result is that this case, in my opinion, wants that evidence of exclusive possession upon which Lord Eldon acted in the case that has been referred to, and that there is so much doubt as to the novelty of what is claimed, and as to the validity of a patent for such a manufacture, that I do not feel that I ought to interfere. It is obvious, however, that the question should be immediately tried. The object will be to have the pleadings at law so arranged that it should be tried at the sittings after this term.

Injunction refused.

PROTHEROE *v.* MAY.

Exchequer, Nov. 20, 1839.

(2 Carp. P. C. 231.)

Exclusive License. Number of Grantees. Extent of Territory.

The grant of an exclusive license to use a patent does not invalidate the patent itself, although the patent may be vested in twelve persons ; and it is

wholly immaterial to its validity in what number of persons such a license is vested, whether exclusive or not.

Such a license would not be invalid if the districts or district covered by the license included the whole extent of the patent.

Trial of an issue out of Chancery.

A bill was filed by the plaintiff for the specific performance of an agreement to grant an exclusive license under the patent ; and a question was raised as to the validity of the patent, in consequence of certain exclusive licenses which had been granted by the assignees of the patent ; and in order to settle this question of law, Shadwell, V. C., directed a case to be made, for the opinion of the Court of Exchequer, as follows :

That letters patent were duly granted August 24, 1838, to Arthur Dunn, enabling him to use and manufacture a new and useful invention he had discovered of "certain improvements in the manufacture of soap," which letters patent, as usual, contained the following clause : "Provided likewise, nevertheless, and these our letters patent are upon the express condition, that if at any time hereafter these our letters patent, or the liberties and privileges hereby by us granted, shall become vested in or in trust for more than the number of twelve persons, or their representatives, at any one time as partners, dividing or entitled to divide the benefit or profits obtained, by reason of these our letters patent (reckoning executors or administrators, as and for the single person whom they represent, as to such interest as they are or shall be entitled to, in right of such their testator or intestate), that then these our letters patent, and all liberties and advantages whatsoever hereby granted, shall utterly cease, determine and become void, anything hereinbefore contained to the contrary thereof in any wise notwithstanding." "Provided that nothing herein contained shall prevent the granting of licenses in such manner, and for such consideration as they may by law be granted."

A proper specification was duly enrolled in the Court of Chancery, within the time limited by the said letters patent for that purpose.

Before July, 1839, and at the time of granting the license next after mentioned, the letters patent, and the liberties and privileges thereby granted, became and were vested in twelve several persons as partners, dividing, or entitled in their own rights respectively, and not by representation, to divide the benefit or profits obtained by reason of the letters patent.

On July 1, 1839, the twelve patentees, or persons in whom the letters patent were so vested as aforesaid, signed and executed an instrument in writing, whereby, after reciting that they agreed with Samuel Guppy and Philip Protheroe, to grant unto them an exclusive license, for the use and exercise of the invention within the city of Bristol, and at such other place or places within thirty-five miles therefrom, as described on the map with a compass, having Bristol for its centre, as they should think proper and in consideration thereof, the said Samuel Guppy and Philip Protheroe have agreed to be bound by such terms, restrictions, stipulations and agreements as are hereinafter mentioned and expressed ; it was witnessed that in pursuance of the agreement and in consideration of the covenants, etc., therein contained, they, the twelve patentees or persons in whom the letters patent were so vested, did give and grant unto said Guppy and Protheroe, and the survivor of them, during the remainder of the term of fourteen years for which the letters patent were granted, the full liberty and exclusive license for them, and the survivor of them, subject to the stipulations therein contained, to use the discovery or invention within the city of Bristol, and within thirty-five miles therefrom ; and in consideration of this license and authority they, the said Guppy and Protheroe, did for themselves jointly, and each of them did for himself separately, covenant with the twelve patentees or persons in whom the letters patent were vested, their executors, administrators and assigns, that they, the said Guppy and Protheroe, and the survivor of them, should and would, during the term for which the letters patent had been granted, continue to manufacture, by means of the patent process and according to the specification, weekly

and every week — tons of soap, at the least, and such further quantity, not exceeding — tons per week as they, the said Guppy and Protheroe, or the survivor of them, should think fit; and that they, the said Guppy and Protheroe, and the survivor of them, should not in any one week exceed the said quantity of tons, without the consent in writing of the said twelve patentees or persons in whom the letters patent were vested, their executors, administrators or assigns. And also that they, the said Guppy and Protheroe, or the survivor of them, his executors and administrators, should and would well and truly pay, or cause to be paid, unto the said twelve patentees or persons in whom the said letters patent were vested, the sum of £— of lawful English money for every ton of soap which they, the said Guppy and Protheroe, or the survivor of them, should from time to time manufacture by means of the patent process during the term for which the license was granted, and should and would make such payments on the first day of every month, the first of such payments to be made on the first day of August then next; and should and would, for the first year of the term, pay unto the twelve patentees or persons in whom the said letters patent were vested, their executors, administrators or assigns, the sum of £— per week, whether or not so much as — tons of soap weekly should have been manufactured by Guppy and Protheroe, or the survivor of them, under and by virtue of the license. And further, that they, Guppy and Protheroe, or the survivor of them, should and would, at or before the respective times so appointed for such payments, deliver or cause to be delivered unto the twelve patentees or persons in whom the letters patent were vested, their executors, administrators or assigns, or unto some person or persons duly authorized by them in writing under their hands to receive the same on their behalf, a just and true account in writing of all the soap which should have been manufactured by them, the said Guppy and Protheroe, or the survivor of them, for the month next preceding the rendering of every such account, together with true copies of all returns made and

rendered to the excise for the like period, and should and would verify any and every such account and copy respectively by affidavit or suitable declaration, if required. And further, that in case they, the said Guppy and Protheroe, or the survivor of them, should at any time or times refuse or neglect to deliver or cause to be delivered such a just and true account as hereinbefore mentioned, at the times and in the manner hereinbefore appointed for that purpose, or should wilfully or knowingly misstate or omit any such account, then, and in every such case, and so often as the same should happen (subject to all other rights and remedies for breach of the said covenant or otherwise), the said Guppy and Protheroe, or the survivor of them, his executors or administrators, should and would, on demand, well and truly pay or cause to be paid unto the twelve patentees or persons in whom the letters patent were vested, their executors, administrators or assigns, in addition to the moneys which would otherwise become payable to them, under and by virtue of these presents, the sum of £— as and for liquidated damages. Provided always, and it was hereby declared and agreed by and between the parties that it should be lawful for the said Guppy and Protheroe, and the survivor of them, at any time after the expiration of one year from the date thereof, to relinquish and give up the license thereby granted, on giving to the twelve patentees, their executors, administrators or assigns, three calendar months previous notice in writing thereof, and that upon and after the expiration of such notice the license should cease to all intents and purposes whatsoever, but without prejudice, and except as aforesaid. And the said Guppy and Protheroe, for themselves jointly and each of them separately, did further covenant with the twelve patentees, or persons in whom the letters patent were vested, their executors, administrators and assigns, that they, the said Guppy and Protheroe, or the survivor of them, should not at any time or times thereafter wilfully or knowingly do, or cause, or permit, or suffer to be done, or wilfully or knowingly concur in or do any act, deed, matter or thing whatsoever contrary to the restrictions and

provisions contained in the letters patent, or in the license, or whereby, or by reason whereof, the validity or continuance of the letters patent, or the rights and privileges thereby granted, or any of them, could or might in any respect be endangered or called in question, but should and would, by every lawful means in their power, assist the twelve patentees or persons in whom the said letters patent were vested, their executors, administrators and assigns, at their expense and to be done under their direction in supporting the same, and in the use and exercise of the invention ; and also give notice to them of any infringement of the letters patent within the knowledge of the said Guppy and Protheroe, or the survivor of them, as soon as the same should come to their or either of their knowledge ; and should and would keep and preserve regular account books, and therein daily cause just and true entries to be made of all soap manufactured by them or either of them, from time to time as aforesaid, and permit and suffer the twelve patentees or persons in whom the said letters patent were vested, their executors, administrators and assigns, and their clerks or agents from time to time, and at all seasonable hours in the day, to take copies thereof and extracts therefrom. Provided nevertheless, and it was thereby further agreed and declared, that if the twelve patentees or persons in whom the said letters patent were vested, their executors, administrators or assigns, should at any time thereafter during the term of fourteen years give or grant any license or authority to any other person or persons to use or exercise the invention in England, Wales, Scotland or Ireland, without similar restrictions and corresponding minimums and maximums, with the excise returns in the ratio thereinbefore stated or mentioned, to the said Guppy and Protheroe, or at a less rate per ton than the sum of £—thereinbefore reserved, that then and from thenceforth the covenants and restrictions thereinbefore contained, so far as the same should be omitted, modified or altered in any such future license to be granted as aforesaid, should be relinquished and become null and void as against them the said Guppy and Protheroe, and they should from and after

the granting of any such license as aforesaid be bound to pay, under and by virtue of the present license, such sum only per ton of soap, to be thereafter manufactured by them, as any future licensee should be bound to pay by virtue of any such license to be granted as aforesaid, it being the intention of the parties thereto that the said Guppy and Protheroe should be in all respects on as favorable a footing as all other licensees; and the said twelve patentees or persons in whom the said letters patent were so vested as aforesaid, severally and respectively, and for their several and respective executors, administrators and assigns, did covenant to and with the said Guppy and Protheroe, and the survivor of them, and the executors and administrators of such survivor, that they, the twelve patentees aforesaid, their executors, administrators or assigns, should not nor would any or either of them at any times or time during the remainder of the term for which the letters patent were granted, if the license thereby granted should so long continue, make or grant any licenses or license whatever to any persons or person to use or exercise the invention in the city of Bristol or within thirty-five miles thereof, without the consent of Guppy and Protheroe, or the survivor of them. And further, that the twelve patentees respectively, their respective executors, administrators and assigns, should not nor would any or either of them at any time during the remainder of the term for which the letters patent were granted, if the license thereby granted should so long continue, themselves or himself use or exercise the invention or manufacture in the city of Bristol or within thirty-five miles thereof. Provided always that if the said Guppy and Protheroe, or the survivor of them, should omit, refuse or neglect to commence and continue the manufacture of soap at the time and according to the stipulations and agreements therein-before contained, or should make default or breach in the performance of any of the other clauses, covenants and agreements therein contained, that then, and in any such case, it should be lawful for the twelve patentees, or persons in whom the letters patent were vested, their executors, ad-

ministrators or assigns, to give unto the said Guppy and Protheroe three months' notice in writing under their respective hands to revoke and make void the license ; and that thenceforth every covenant, clause, matter and thing therein contained should cease except, and without prejudice to the right of them, the twelve patentees or persons in whom the letters patent were vested, their executors, administrators or assigns, to recover all money which should be then due and payable to them, under and by virtue of the present license.

Under the said license the said Protheroe and Guppy have used and exercised the patented invention within the city of Bristol and such other places within thirty-five miles thereof as they have thought fit, and they have since assigned the license and the benefits thereof to or in trust for a company or copartnership consisting of more than twelve persons who are now using and exercising the same, and have duly paid the rents made payable by virtue of the said license.

On July 2, 1839, the twelve patentees or persons in whom the said letters patent and the liberties and privileges thereof were so vested as aforesaid gave and granted twelve other similar exclusive licenses to use and exercise the patent right and invention in twelve several districts other than the city of Bristol and places within thirty-five miles thereof, of which twelve licenses eleven were granted severally to eleven individuals (that is to say, each to one distinct person), and the twelfth was granted to a certain partnership consisting of thirteen persons.

The districts covered by the licenses are parts of England only. They do not comprise the whole of England.

The following questions were therefore submitted to the Court of Exchequer :

1. Has the grant of the said first-mentioned exclusive license to the said Philip Protheroe and Samuel Guppy invalidated the letters patent of itself, without reference to the subsequent facts ?

2. Has the assignment to and vesting of the said first-mentioned license in the said partnership of more than

twelve persons invalidated the letters patent of itself, and without reference to the other facts stated ?

3. Has the grant of the said twelve last-mentioned exclusive licenses, or of any, and which of them, invalidated the said letters patent ?

4. If the third question should be answered in the affirmative, would the result be the same if the last of the twelve licenses had been granted to a less number than twelve persons ?

5. If the grantees of all the licenses were to coalesce and become jointly interested in such licenses, would the letters patent be thereby invalidated, if not otherwise invalidated ?

6. Would the letters patent, if not otherwise invalidated, have been so if the districts covered by the licenses had included the whole of England, Wales and Berwick-upon-Tweed ?

7. Would they have been so, if such districts had included the whole of England, Wales, Berwick-upon-Tweed and the colonies ?

Roupell opened the case, and shortly stated the questions.

Lord ABINGER, C. B. On which side are you ?

Roupell. For the licensee.

Lord ABINGER, C. B. We will hear the other side.

Rotch. The principal question is, if all licensees unite, the districts covered by licenses being all England, they have an interest equal to patentees.

PARKE, B. A license is no interest in the patent. The answer to the first question proposed is clear ; then why should they not unite ?

Rotch. A patent is a monopoly. First question is clear for license, I admit ; but the Vice-Chancellor thought the circumstance of a combination among all the licensees might affect the patent. If your lordships are so clear upon the point, I do not desire to occupy time in argument. I am well satisfied that such is the court's decision. The question is one of great public importance.

PARKE, B. A licensee has a distinct interest. How can a combination affect the patent right ? The answer to all the questions must clearly be in the negative.

Lord ABINGER, C. B. The questions will be answered in the negative.

And their lordships subsequently gave their answers as follows :

“ We have heard this case argued by counsel, and considered the same, and are of opinion—

“ 1. That the grant of the first-mentioned exclusive license to the said Philip Protheroe and Samuel Guppy did not invalidate the letters patent.

“ 2. That the assignment to and vesting of the said first-mentioned license in the said partnership of more than twelve persons did not invalidate the letters patent.

“ 3. That the grant of the said twelve last-mentioned exclusive licenses, nor any of them, did not invalidate the said letters patent.

“ 4. That if all the grantees of all the licenses were to coalesce and become jointly interested in such licenses, the letters patent would not be thereby invalidated.

“ 5. That the letters patent would not be invalidated if the districts covered by the licenses had included the whole of England and Wales and Berwick-upon-Tweed.

“ 6. That they would not have been so if such districts had included the whole of England, Wales, Berwick-upon-Tweed and the colonies.”

Subsequently the Vice-Chancellor gave judgment as follows :

The plaintiffs are entitled under the deed or indenture, dated July 1, 1839, in the pleadings mentioned, and the covenant in such indenture contained, to have granted to him an exclusive license for the use and exercise of the invention of certain improvements in the manufacture of soap, in the pleadings mentioned, within the city of Bristol, and at such other place or places within thirty-five miles therefrom as described in the map, with a compass, having Bristol for its centre, as the plaintiffs may think proper, for the term, and upon and under the terms, stipulations, covenants and agreements contained and expressed in the same indenture ; and decree that the defendants do

grant and execute to the plaintiffs such license accordingly, and that the plaintiffs do execute a duplicate or counterpart thereof, and refer it to the Master in rotation to settle and approve of such license, in case the parties differ about the same. Liberty to apply.

GALLOWAY v. BLEADEN.

Common Pleas, N. P., Nov. 30, 1839.

(1 Web. P. C. 521.)

What constitutes Infringement. Ambiguity in Specification. Evidence of Novelty. Experiment.

An infringement is a copy made after and agreeing with the principle laid down in the patent.

The specification must contain such a fair and clear statement that a person with a competent degree of knowledge upon the subject-matter to which the patent relates would be able to make that which the plaintiff enjoys the exclusive privilege of.

If there is a want of clearness, so that the public cannot afterward avail themselves of it, much more, if there is any studied ambiguity in it, so as to conceal from the public that which the patentee for a term is enjoying the exclusive benefit of, no doubt the patent itself would be completely void.

It is only necessary for the plaintiff to make out a *prima facie* case as to the novelty of his invention, to call upon the other side to show affirmatively that it is not new. This the plaintiff may do by calling persons who are conversant with the subject of the patent, and who pass their time in understanding the nature of patents, and in following up and discovering what are the inventions that are going on from week to week, to say that they had not before heard that there had been such a discovery previous to the grant of the patent.

A mere experiment or a mere course of experiments for the purpose of producing a result which is not brought to its completion, but begins and ends in uncertain experiments, that is not such an invention as should prevent another person, who is more successful, or pursues with greater industry the chain in the line that has been laid out for him by the preceding inventor, from availing himself of it, and having the benefit of it.

Trial of an action for infringement.

The declaration, after stating the grant of the letters patent, and the enrolment of the specification, and the as-

signment of a half share to Routledge, assigned as breaches that the said company made paddle-wheels for propelling vessels on the said improved plan or principle, and in imitation of the said invention ; used and put in practice paddle-wheels in imitation of the said invention ; counterfeited, imitated and resembled the said invention ; made paddle-wheels, with other improvements in the construction thereof, intended to imitate and resemble, and which did imitate and resemble the said invention.

The defendant pleaded : 1. That the said company were not guilty. 2. That the plaintiff Galloway was not the true and first inventor. 3. That the said invention was not particularly described by the specification. 4. That the said invention was not a new invention or manufacture within the realm, but had been and was publicly practised and used by others before and at the date of the said letters patent.

The following was the notice of objections : 1. That the said E. G. was not the first and true inventor of the said improvements for which the patent in the declaration mentioned is alleged to be in force, but that all said improvements before the date and grant of the said letters patent had been and were invented, used and in practice by Messrs M. and F., or one of them. And that the use of divided floats, applied according to the principle or mode described in the writing or specification in the declaration mentioned, was discovered, invented and in practice by the said Messrs. M. and F., or some or one of them, before the date and grant of the said letters patent. 2. That the said alleged invention, for which said patent was granted, is not an invention of any new manufacture within this realm, but is merely an invention of a principle ; that is to say, the principle of arranging the floats of paddle-wheels in divided portions, and in a form calculated to displace the least possible quantity of water in their immersion, and not for any specific means of applying that principle to practical purposes ; and that said patent is calculated to prevent the said principle from being investigated and usefully applied by others. 3. And that the specification of said patent does

not sufficiently describe and ascertain the nature of the invention, and in what manner the same was or is to be performed ; and is ambiguous, obscure and insufficient in this, that the specification does not give or suggest any specific means of determining the supposed point, called *l* (in the drawings accompanying said specification, No. 1), at which it is necessary to place the floats at a less angle to the radius of the wheel than the angle *l d e* ; nor does said specification state or show at what angle it is that said patentee places the bars or floats in such positions that they will be nearer to each other than said position therein called *d* to *l* ; nor does said specification state or show at what angle, or in what line, whether curved or straight, said bars or floats are to be placed, when the space between any two of them would be too great if arranged in the cycloidal form. 4. And that the principle of the said patent and the application of that principle had, previously to the date and grant of said letters patent, been discovered and known and used by Messrs. M. and F., or one of them ; and also that said specification is too large and extensive, and claims too much, inasmuch as it includes a certain invention of a similar kind made, used and put in practice previously to the date and grant of the said letters patent, by the said Messrs. M. and F., or one of them, and would, if valid, prevent the exercise of the said invention.

The nature of the case and the evidence sufficiently appears from the summing up.

TINDAL, C. J. This is an action against the Secretary to the Commercial Steam Packet Company, to recover nominal damages for the infringement of a patent for certain improvements in paddle-wheels for propelling vessels. In answer to this action the defendants set up three grounds of defence : 1. They say they are not guilty—that is, in other words, that the paddle-wheels they have employed in the Chieftain and the other ship called the Grand Turk are not an infringement of the patent ; then they say that the nature of the invention and the manner of its performance have not been truly described in the specification. Now

that is a good answer in point of law ; it is a condition on which the party to whom the patent is granted obtained it ; and it being a condition, it must be performed strictly—that is, he must communicate by his specification to the world a sufficient mode of making this improvement, of which he has the exclusive privilege for the fourteen years, in order that, when the patent has expired, the public may have the full benefit of it on reference to that specification. The third and remaining ground of the defence is that the supposed invention was not a new invention, but was used in England before the grant of the patent ; that again is a sufficient answer to the validity of the patent, if the Crown was deceived, intending only to grant a patent to the original inventor of a commodity or thing that was not generally known or used in England before.

Now, with respect to the first, that the wheel is not an infringement—that the paddle-wheel used by the defendants is no infringement of the patent granted to Mr. Galloway—the evidence lies in a very narrow compass. There have been two witnesses called on the part of the plaintiffs, viz., Mr. Carpmael and Mr. Cottam, and they were asked, having read the specification and seen the model which was produced before them, whether the wheels of the Grand Turk and the Chieftain are not an infringement, a copy made after and agreeing with the principle laid down in the patent ; and they unequivocally say they think they are. No witnesses have been called on the other side to whom that question has been distinctly put, who have been asked whether they believe it to be an infringement or not ; but every witness was asked this question, whether it agreed with a certain wheel that had been supposed to be invented or discovered by Mr. Field in 1833, and put on board the Endeavor. That was the way in which every question was put ; not a distinct question, so as to bring forth a distinct answer on the subject of the infringement, but putting it in that collateral way, meaning, as the defendants contend, that the plaintiff's invention is borrowed from the one which was known before ; virtually, therefore, they wish to show that the two inventions were in fact the same ; but it cer-

tainly appears to me that as they did not put the question distinctly and directly, whether in the opinion and judgment of the defendants' witnesses such infringement had taken place or not, that they rather fortified the plaintiff's case than weakened it, by drawing out from their witnesses that it was made on the same principle as the wheel that was put on board the Endeavor, it being a main part of their case that this was a discovery which the plaintiff Galloway has since adopted and got a patent for.

The next answer that is put on the record is that the plaintiff Galloway did not so describe the matter in the specification as by law he was required; that he has not, in the language of the plea, truly described his invention; and if there is a want of clearness, so that the public cannot afterward avail themselves of it, much more, if there is any studied ambiguity in it, so as to conceal from the public that which the patentee for a term is enjoying the exclusive benefit of, no doubt the patent itself would be completely void. This is also a question to be determined on the evidence brought before you. If it had appeared on the face of this specification that it was so manifestly ambiguous in the terms used as that no person of ordinary sense and judgment on reading it could make out what the party professed to disclose and was bound to disclose, then the specification would not be a compliance with the patent; but it does not appear to me at all, upon looking at it, that there is such doubt and difficulty in the construction of the specification itself. There has been a great deal of stress laid on what we heard so often—the coincidence of the rolling cylinder, which is to represent the rate of going of the vessel, and the wheel which forms the circle or boundary of the lower part of the floats—and a great many observations have been made that certain cases that may occur are not provided for in the specification. It does not, I confess, appear to me on the face of the specification that such is the necessary conclusion, because you are to take it, not by itself, but with reference to the figures; and when you look at that figure which is called Fig. 1, and compare it with the statement made in the specification, I confess I am un-

able to say, on merely perusing it, which is all I am bound to say, that there is that degree of difficulty, or, in fact, that I feel any great difficulty on the subject. But the main question on this point is for you, and that is, whether it is such a fair and clear statement that a person with a competent degree of knowledge upon the subject-matter to which the patent relates would be able to make that which the plaintiff now enjoys the exclusive privilege of. The two first witnesses state that in their judgment a perusal of this by a workman employed in manufactures of this nature and description would qualify him to make a wheel of the nature of those, in the same manner and with the same properties as those which the plaintiff at present enjoys under the patent. I do not find that even that is broken in upon by the other side, for there is no witness called to whom that question is put except Mr. Field ; and Mr. Field's answer to one part of it, where the question is put to him, is this. He says, "I have read the specification, and looking at the specification (which was the main point that was put to him about the rolling circle), I think the rolling circle and the inner circle of the floats are intended to be the same circle." He says it is not expressed in the specification whether d belonged to the rolling circle of the edges of the floats. If it belonged to the rolling circle, all he says is this, I do not think a workman would know whether the point d was the point belonging to the inner circle or the rolling circle ; that is his judgment. If you have had an opportunity of looking at the figures as connected with the specification, I confess in my mind it does not appear a subject-matter of doubt that that d is the point that is formed by the surface of the common radial float with that inner circle, and this only gives you the point upon which to set off, on such occasion, to form your cycloid for the new form of floats, provided that may or may not be the case.

Now the third and last is the main point in this case, whether this was an invention new at the time, or whether this improvement was new as to the public use and exercise thereof in England. The date that I have to call your atten-

tion to is the date of the patent—namely, August 18, 1835 ; what you have to ask yourselves is, whether, on the evidence, that which Mr. Galloway has described in his specification was new at that time, or whether it was known and practised before in the realm of England. Undoubtedly, if it was, there is an end of the patent ; upon that point the law is undoubtedly now understood to be this : a mere experiment, or a mere course of experiments, for the purpose of producing a result which is not brought to its completion, but begins and ends in uncertain experiments—that is not such an invention as should prevent another person, who is more successful, or pursues with greater industry the chain in the line that has been laid out for him by the preceding inventor, from availing himself of it, and having the benefit of it ; therefore the main point in this case is, whether all that is allowed to have been done by Mr. Field rested in experiment, and unsuccessful experiment not conducted to its full result, or whether it was a complete discovery of that which now forms the subject-matter of the patent. On that the evidence of Mr. Carpmael and Mr. Cottam is, as you will suppose, only general, because they are called to negative that this was known before. Therefore all they can say is, that they are people who are conversant with subjects of this description, and pass their time and part of their lives in understanding the nature of patents, and in following up and discovering what are the inventions that are going on from week to week ; and all that they say is, that they had not before heard that there had been such a discovery previously to the issuing of the patent in August, 1835. Therefore that is enough to call on the other side to show affirmatively that it was not new, that it was an old matter, and used and exercised before within the realm of England ; and you must say whether the evidence which they have brought before you, in the way in which it seems to me it ought to be understood, has brought your minds to that conclusion or not. That is a mere question of fact which you must decide for yourselves.

Upon that Mr. Field is first called, and gives an account of all that he had done in the way of invention and car-

rying that invention to the purposes of practice, and the account he gives is this. He says, "In the year 1833 I made an improved wheel, a model of which I took to the Admiralty." Then he gives you the original model that he made at that time. He says, "This is the one I made it from, and I conceived the idea of dividing the board into a curve, which curve I obtained by holding my pencil at the edge of the supposed water-line; I then placed the same quantity of surface of paddle in four bars—that is, a cycloidal curve." Then he says, "This model shows it better; that is the new model that I made; at that period we were employed by the Admiralty, and had just completed six large steam-engines. I wrote to the Admiralty." Then he says, in consequence of that, he afterward went and attended there. He says, "The model was produced and explained by myself and partner to the Admiralty; they were much pleased, and they determined to adopt it; they said the next vessel that arrived should have the improvement." A vessel did arrive; however, he had not at that time the vessel, because it did not happen to be of their own make, but some other person's. And then he says, "The model remained about a week in the Admiralty; we kept it in the drawing office of our manufactory; we showed it to any one that came who wished to see it, and to any persons concerned in steam vessels." Then he goes on to say, "I made an experiment myself in a small vessel of our own." The question you are to determine is, whether on the evidence the thing itself was complete, so as to be used, or whether only a series of experiments were going on. Up to this time the model had been shown, but not any actual paddle-wheel made; much less up to the time we are now discussing had any one been applied to any real practical use. Now comes in what he calls himself an experiment—"In a small vessel of our own, the Endeavor, which is a steamer from London to Richmond; we put a paddle upon it; this paddle is suited for the sea, and not for fresh water; we put one fresh paddle on the wheel of the Endeavor; the result was, the agitation of the water was quite removed, or scarcely perceptible; we

continued the experiment (as he called it) for some weeks ; we then restored the former wheel." It is afterward explained that the reason why this wheel was taken away and the old one restored, according to the captain's account, was because the boiler was not large enough to make steam sufficiently fast for this, which had a quicker rotary motion. Then he goes on to say that in 1835 a great many experiments were made. "I got this original knowledge in the year 1833." And when we are discussing whether he had brought that to any degree of perfection at that time, so as to be a matter that was known and capable of being applied to vessels at all, it is odd and singular enough (but that will be for your consideration) that he should go on in 1835 making a great many more experiments. He says, "In 1835 we made a great many experiments, of which the general character was to ascertain the various qualities of wheels, chiefly cycloidal wheels, and comparing those wheels with Morgan's wheel. I had a very extensive apparatus constructed for the purpose of these experiments ; it stood in a very public part of the premises ; no person was excluded, a great many saw it ; it was in the thoroughfare of the manufactory. We had between four hundred and five hundred employed at that time in our manufactory." He says how the apparatus was constructed (which I think was not very material), but that apparatus they constructed merely for the purpose of deciding upon these experiments. Then he says, "These experiments were made between April 16 and June 12, 1835. We had a person solely employed in these experiments ; no secrecy whatever was observed ; on the contrary, we invited people to come and see them. I first heard of the patent taken out by Mr. Galloway on September 8, 1835. I remember a model put up by him in the Adelaide Gallery." It appears, therefore, from the month of September, 1835, Mr. Field was fully conscious that there had been this patent granted to Mr. Galloway, and we do not hear of any opposition to it for a very considerable period afterward. Indeed, these defendants, a year afterward, so little are they informed, or so little do they know that

there had been a doubt as to the validity of the patent, that they pay for the use of these floats, for a vessel of theirs called the *Calpe*, £40, having previously, in the years 1835 and 1836, just after the granting of the patent, had the same patent improvement applied at a much larger sum to other vessels. Then he says, "I have carefully examined the specification of Mr. Galloway; I have seen the models produced; the principle laid down in that specification is precisely the same as mine; I had the same object in view—that of arranging the floats in a cycloidal curve; I have not been able to find in Mr. Galloway's specification anything whatever different to what I had in view, except what I had before; the advantages mentioned in his specification are the very same advantages that I contemplated and proposed." Gentlemen, then he is cross-examined as to this point, and he says, "I have taken out patents myself, altogether three, one of them a little time ago; the idea crossed my mind for taking out a patent for this discovery. I entered a caveat for my discovery in 1833. I never did anything upon it. It is now a very valuable wheel, it is now in general use; a valid patent for such a wheel would be very valuable to the patentees, it would be valuable to me; I continued making experiments till July, 1835." Certainly it is not an improper observation, one that you should bring before your own minds on this question—that is, whether it was the invention of Mr. Field before Mr. Galloway, and an invention carried so far to perfection that the matter might be known and used in England; that as he had entered a caveat at the office of the law officers of the Crown, he must have had notice of this; the patent would not have passed without some notice given to him that such patent was taken out; and yet you see, though he had put in his caveat in the year 1833, and made experiments from April to June, and goes on making experiments to 1835, he does not at all interpose or set up his claim at that time to take out a patent. I do not mean to say he was bound to do it, or that his not doing it will decide this question at all; but when we are considering the course that men ordinarily pursue in looking after their

own interest, the question is, whether he is perfectly to be depended on as to the exact identity of this discovery--that this, which is now the subject of a patent, was the very discovery which he himself had made. That is for you and not for me to determine. Then he goes on to say, "I continued making experiments till July, 1835. I never fitted up a vessel for a customer till the Dover Castle, that was the name of it; the wheels were afterward altered from three boards to two, and so they continued. That vessel did not go faster nor slower than before, but the vessel was better for the sea; she was always a slow vessel. The next vessel we fitted up with split boards was the African; that was in the summer of 1836"--that is, after the period when this patent is granted; therefore, anything that is done after that, if it is a wheel of the nature and description of that for which the patent is granted, that is not to be brought in evidence against the plaintiff as a prior discovery, except so far as that the party who gives the evidence says that it was upon his own principle, and not upon the principle of the patent. The mere fact of applying it so late as the year 1836, the year after the patent was granted, would not of itself, of course, show that the subject-matter had been known and used in England a year before. Then he says, "I am not quite positive that I fitted up any but the Dover Castle with wheels on this construction. I fitted up the Great Western with wheels of this construction in the year 1838; the wheel is now in great repute; I had no knowledge of the floats being divided in this way before I did so myself. I did nothing for the Admiralty before August, 1835." Then, in fact, he says, "I did not do it till the summer of 1836. I did take off the new wheel, after having satisfied myself with the experiment, and I put on the old boards again." He says, "We did nothing in 1833, 1834 and 1835; in 1835 we commenced our experiments, and we still continued to make comparative experiments." Then he goes on to say something more as to the specification, which is not material.

The point, as it seems to me, for your consideration is, whether you are satisfied or not that, at the time when

this patent was taken out, the invention for which the patent was obtained was a new invention, and not used publicly in England, which are the words of the plea. That there had been many experiments made upon the same line, and almost tending, if not entirely, to the same result, is clear from the testimony you have heard ; and that these were experiments known to various persons ; but if they rested in experiment only, and had not attained the object for which the patent was taken out, mere experiment, afterward supposed by the parties to be fruitless, and abandoned because they had not brought it to a complete result, that will not prevent a more successful competitor, who may avail himself as far as his predecessors have gone of their discoveries, and add the last link of improvements, in bringing it to perfection. If that is the case, the plaintiffs are entitled to your verdict. If it was then known, at the time when the plaintiff took it up, and was publicly known and used in England, then in that case the patent is invalid, and in that case you would find your verdict for the defendant. If you find it for the plaintiffs, it will be only nominal damages ; the question is not here for any profits, but simply to decide the right between the parties.

Verdict for the plaintiffs.

No application was made to the court to disturb the verdict, but a rule was obtained calling on the plaintiffs to show cause why judgment should not be arrested, on the ground that the declaration was defective, no right of action being shown against the defendant on the record ; there being no allegation that he was the registered officer of the company, pursuant to the act of Parliament, 7 Will. IV. and 1 Vict., c. 73. On a subsequent day the plaintiffs obtained a rule calling on the defendant to show cause why the record should not be amended by inserting the proper allegation in the declaration. The court made the latter rule absolute on terms of the plaintiffs paying the costs of both rules, and foregoing the costs of the action. See *Galloway v. Bleaden*, November 30, 1839.

PARKIN *v.* HARRISON.

Chancery, V. C., Jan. 17, 1840.

(2 Carp. P. C. 677.)

Length of Time to establish Prima Facie Legal Right of Patentee. Accuracy of Specification Essential to establish Prima Facie Right. Prerequisites to Injunction. Admissions by Defendant's Affidavits.

Lapse of a few months only since the grant of a patent, with no evidence that the invention had been made use of, *held*, not sufficient to establish *prima facie* legal right in the patentee.

Specification in Parkin's patent for paving with blocks of wood "having the grain inclined to the horizon in some angle, varying from about forty-five degrees to about seventy degrees," *held*, not sufficiently accurate to establish *prima facie* claim.

A claim for "dowelling blocks of wood together in paving when slanting or leaning in opposite directions," *held*, not of itself to describe a patentable invention.

Where only a short time since the grant of a patent had elapsed, the invention had not been put to use, and the specification was somewhat vague, and there was no clear admission of infringement by the defendant, *held*, that the patentee seeking an injunction should first establish his right at law.

Suit for injunction.

Knight Bruce applied to the Vice-Chancellor for an injunction to restrain the defendants, their servants or agents, from paving Whitehall, or any other road or way for carriages, with blocks of wood formed with the grain inclined to the horizon and dowelled together as described and claimed in the specification of letters patent granted to the plaintiff, Thomas Parkin, on April 9, 1839. In support of the application it was declared by the plaintiff that, after many experiments and great expense, he invented "improvements in railroad and other carriages, and in wheels for such carriages, and in roads and ways on which they are to travel," among which improvements were several improved modes of forming and laying wooden blocks for pavements, which he described in his specification as follows: "My improvements in roads and ways consist according to

this, my first mode, of paving them with blocks of wood, having the grain inclined to the horizon in some angle varying from about forty-five degrees to about seventy degrees, the grain of all the blocks leaning in the same direction, or toward the same points of the compass. And according to my second mode of paving with similar blocks, as in my first mode, but the alternate rows of blocks leaning toward the opposite point of the compass, each pair of leaning blocks being sometimes held together by a dowel, passing through the middle of both blocks." That immediately after this declarant's patent was granted, he publicly advertised and exhibited his invention.

That on June 27, 1839, a patent was granted to Richard Hodgson for an invention communicated to him from abroad by Comte de Lisle, which invention does not differ in any material respect from the invention already patented by the plaintiff.

That on or about the beginning of July the defendants and others purchased Hodgson's patent, and advertised proposals for forming a company called the "Metropolitan Patent Wood Paving Company," to carry on the alleged invention of Comte de Lisle. That shortly before the date of such advertisement the plaintiff had entered into an agreement with Hunt Grubbe, for the sale to him of so much of his patent as relates to wood paving, upon the following terms: £1,000 to be paid down, £1,000 more on July 15, and £1,000 more in three months, on condition of parties being found by Hunt Grubbe, within that period, to furnish capital to carry out the invention; and in the event of either of these conditions not being complied with, then the agreement to be considered null and void. That on July 13 the said Hunt Grubbe informed him that he had assigned the said agreement to Richard Hodgson. That on July 15 Mr. Hodgson called on plaintiff, and gave him to understand that he had purchased the agreement of Hunt Grubbe on behalf of the company, and on paying the £1,000 due on that day, stated that he had no doubt the company would pay the £1,000 on September 28 as provided by the agreement. It further appeared by this declaration that

Mr. Hodgson declined to pay the sum of £1,000 on September 28, and stated that the company would neither purchase the patent nor take a license to use the pavement, because it would amount to an admission that the patent granted to him, the said Richard Hodgson, was void ; but that the company were willing to employ the plaintiff to superintend their business and pay him a handsome salary. The declaration also stated several propositions for an arrangement between the plaintiff and Hodgson on behalf of the company, which, however, were not carried into effect ; and the company having proceeded to have a part of the road opposite Whitehall paved, the plaintiff was compelled, in support of his patent right, to make this application.

John Isaac Hawkins, civil engineer, in his affidavit states that he was applied to in the month of August by certain parties to negotiate with the plaintiff for the purchase of his patent, so far as respects wood pavement ; but that plaintiff, not being able to get any final answer from the said Mr. Hodgson until after September 28, the negotiation went off, and has not since been renewed ; and in the opinion of deponent the plaintiff thereby lost the opportunity of disposing of his patent to good advantage.

On the part of the defendants the following affidavits were filed :

William Carpmael, civil engineer, saith that he was consulted by the plaintiff previous to his applying for his patent, to advise as to the proper title, for which purpose the plaintiff delivered to him a paper containing the particulars of his invention ; that immediately on preparing the title of plaintiff's patent, he returned the said paper writing, but that he has a perfect recollection of the contents of the said paper, and that the invention there described did not in any manner resemble the invention patented by Mr. Hodgson (a model of which was produced to the Solicitor-General at the time of his application for the patent) or the wood pavement now laid down at Whitehall, or the models or shapes described by the Figs. 23 and 24 contained in the drawings referred to by the said plaintiff in the specification of his patent.

Augustus Comte de Lisle saith he is a native of and domiciled in France. That in the month of May last he came to this country and communicated an invention of his own to Mr. Richard Hodgson, and who on his behalf applied for letters patent for the same, and which were granted June 27 last. That the application for the patent was opposed by two persons, but that no opposition was entered by the plaintiff or by any other person on his behalf. That after the sealing of the patent no secret was made of the invention, but that it was freely communicated to all persons taking an interest therein ; and in particular as to July 9, the deponent exhibited and explained his invention to the Duke of Sussex and a numerous auditory.

Richard Hodgson saith that Mr. Hunt Grubbe was present at such public explanation, and informed deponent that plaintiff had obtained a patent for an invention in some respects resembling that of the deponents ; and that he had purchased so much of that patent as related to wood paving. And deponent, not being aware of the merits or nature of said plaintiff's alleged invention, and having no means of judging whether in truth it did or did not resemble deponent's invention, and perceiving that the agreement was conditional, and being apprehensive that the said Hunt Grubbe and plaintiff might get up an opposition to the company for carrying into effect the principle of deponent's invention, which he was then forming, and which was known by the said Hunt Grubbe, the deponent agreed to purchase the right of the said Hunt Grubbe in the plaintiff's patent. That the deponent did not give the plaintiff to understand that he procured the assignment of the said portion of the plaintiff's patent as the solicitor and on behalf of the persons calling themselves the "Metropolitan Patent Wood Paving Company ;" neither did he say that he, deponent, had no doubt the company would pay the £1,000 on September 28 as provided in the agreement ; and being advised that the payment of the £1,000 might be considered prejudicial to his patent, he declined to make such payment, and suffered the agreement to become void. Both deponents say that the wooden pavement laid down at White-

hall is in accordance with the principle of the said invention of the said Richard Hodgson as described in his specification, and that the inclination of the blocks of wood of which the said pavement is composed is not of about forty-five degrees as stated in plaintiff's said bill, but such inclination is of the precise angle of sixty-three degrees, twenty-six minutes, five seconds and eight-tenths, being the only angle claimed in the said last-named specification, and that on which the principle of the invention depends ; and that the appositively leaning blocks are not such blocks, nor are the same fastened as are mentioned by the plaintiff in his first and second modes of paving with wood as described in his specification ; but that the same are held and fastened together by pegs, each peg being placed in the centre of the two isosceles triangles which each lateral side surface of each block presents, and which said triangles are produced by each block being cut at the precise angle aforesaid ; and that by such means each block gives the same support which it receives from the other block, and enabling the whole mass of blocks when fastened as aforesaid to present a compact surface of any extent.

Jacob, on behalf of the defendants, contended that the plaintiff was not the inventor of the mode of wood paving claimed in his specification, but that the invention had evidently come to his knowledge by the publicity given by the Comte de Lisle of the invention discovered by him long before the plaintiff's patent was applied for, and therefore prayed his Honor to refuse the injunction.

SHADWELL, V. C. In this case the question will be, first of all, whether the plaintiff has a valid patent, and next, whether the defendants have infringed the patent. Well, now with respect to the plaintiff's patent, I must observe that, in the first place, it never appears to have been acted on ; there is no instance alleged in which it has ever been said that there has been any dealing on it whatever, except that strange course of treaty on the subject which arose out of the agreement between the plaintiff and Mr. Grubbe. Well, that having been the only dealing on it, it is impossi-

ble to say that any validity is to be attributed to the patent on account of its length ; for the patent, I think, was dated April 9 and the specification was filed on October 9, and there has been a treaty about it, and that is all ; and consequently, therefore, I think the court is not bound to say that the length of time is such as of itself *prima facie* establishes the legal right of the patentee. Now I cannot but myself think therefore that the court is at liberty to look into the specification, and see whether it is *prima facie* reasonably clear that the specification is good ; and when I look at the specification I am sure I am not willing to give any final judgment on it, because it is not my province so to do ; but I cannot but myself have considerable doubt whether this specification is a sufficiently good specification as to this matter : " And, seventhly, my improvements in roads and ways consist, according to this, my first mode, in paving them with blocks of wood having the grain inclined to the horizon in some angle varying from about forty-five degrees to about seventy degrees, the grain of all the blocks leaning in the same direction or toward the same points of the compass." Well, now it is observable that where a party is speaking about angles, he is speaking of a matter of quantity about which it is extremely easy to speak with accuracy, and I cannot but myself think that, according to the language that is here used, it is really and fairly a doubtful matter—that is to say, legally doubtful, whether that thing which might have been expressed with sufficient accuracy has been expressed with sufficient accuracy, or whether it is possible to make out exactly what it was that the party did mean. Now, strictly speaking, the words as they stand do only imply that it was to be at some angle, not forty-five or seventy degrees. I am quite sure the party did not mean that, and therefore I have a case before me in which in the words of the specification the party uses language of which all that can be said is that with reasonable certainty it does not express the party's meaning. Well, then, in the latter part, where he speaks of what he had before spoken of : " Having regard to my seventh head of improvement of roads and ways, I say that the first and second mode is the

paving with blocks of wood, having the grain inclined to the horizon from about forty-five degrees to about seventy degrees ; and I claim the dowelling of the blocks together in paving when slanting or leaning in opposite directions ;" and then he speaks about the rails, and so on. Now, I cannot but myself think here that the party has meant to have it understood that the dowelling itself is a part of the invention, and therefore, *prima facie*, I should have thought it rather contrary to one's common experience to have it, in the year 1839, claimed as an invention that certain blocks of wood were to be fastened together by means of dowelling, and I doubt whether that is any invention at all. Now, I cannot but myself think that on such a patent as this, before the court does anything so as to interfere against the defendants, the court ought to take some method to have it established that the plaintiff has got that legal right which the plaintiff pretends to have. But, then, with respect to the second part of the case, supposing that the plaintiff's patent is good, is it so clear that what the defendants have done is a violation of the patent ? I do not mind the mode in which that affidavit is made on which Mr. Knight Bruce has laid so much stress—namely, the speaking by Mr. Hodgson and the Comte de Lisle in the way they do about the invention ; what they say is, "They verily believe that the invention for which the above-named plaintiff took out the letters patent in the bill mentioned did not and does not, in any respect, correspond to or resemble the invention of this deponent, Richard Hodgson, communicated to him by the other deponent, Augustus de Lisle ;" and they say "that the plaintiff hath improperly laid claim to the said last-named invention, and hath endeavored to include the same or such part thereof as relates to wood pavement in the specification of his said patent." Now, I cannot but think that the fair inference of that affidavit is that they mean to say that the patent in fact and truth is for an invention different from the defendants' invention, but that the plaintiff wishes to have it thought that his specification is for the same invention ; that is what I understand the plaintiff to say, and therefore by no means to admit, as Mr. Knight

Bruce presses on me that they do admit by the affidavit, that these two inventions are the same.

Now, with respect to the defendants' invention, as I understand it from their specification, it is a precise and definite thing, and is an invention by means of cutting a cube in a certain manner which is detailed in the specification itself ; and it appears to me that where the defendant does point out a particular mode of cutting the solid body, the cube, in such a manner as that, invariably and of necessity, there must be figures precisely of the same shape produced, always having certain given angles upon the planes of the sides, and therefore always producing, when laid transversely one across the other, that certain isosceles triangle of which he speaks, which enables him exactly to determine and place the same in all places, however numerous, in which they can be introduced, the hole and the pin which will have the effect of uniting several blocks with each other in the manner that is easily shown by those instruments,—I cannot but think that he, *prima facie* at least, has invented a definite thing which does materially differ from that very vague and indefinite thing which the plaintiff has described in his specification. Now I think myself therefore that, before I interfere by injunction, what I ought to do is to direct the plaintiff to bring such action as he may be advised. In that action he will have, in the first place, to make out that his patent is a good and legal patent, that is the first fact he will have to make out ; and then he will have to make out that by the act which the defendant actually has done, the patent, if good, has been infringed ; and both those points can be determined simply by directing that the plaintiff shall bring an action. It is not necessary to give any special directions as to admissions, but it does appear to me that the case stands in such a shape that it will be too much to infer from these very singular affidavits, which contain a series of conduct of a most extraordinary kind with respect to the agreement and the treaty on it ; it does appear to me to be too much to infer from those affidavits that there has been a clear admission on the part of the defendants that what the defendants are

doing is the same thing as what the plaintiff has taken out a patent for, or to infer that the defendants have admitted their patent to be only for that thing for which the plaintiff has taken out his patent, or to infer that the defendants have at all conceded any point ; which if I do correctly understand their affidavits, they were determined from the beginning to defend as manfully as by law they might, and perhaps by other means if necessary. And it does appear to me, therefore, that in this case the proper order to be made is to direct the plaintiff to bring such action as he may be advised, and to direct the motion to stand over, with liberty for both parties to apply.

COLLARD *v.* ALLISON.

Chancery, May 14, 1840.

(4 Mylne & C. 487, 489.)

Injunction. When refused, pending New Trial.

After the patentee had obtained a verdict in an action brought to try the validity of the patent, the court refused to grant an injunction to restrain the infringement of the patent, on the ground that a rule *nisi* for a new trial had been obtained and was pending in the court of law, and that the legal title of the patentee was therefore still undecided.

Second renewal of motion for injunction.

After the Chancellor had denied a motion in this cause for an injunction, directing an action at law (*ante*, November 15, 1839), the action was tried before Lord Denman at the sittings after Hilary Term, 1840, and a verdict found for the plaintiffs in favor of the patent. On the first day of the following term the motion for the injunction was renewed ; but it appearing, on affidavit, that a bill of exceptions had been tendered, and that the defendants also intended to move for a new trial in the court of law, the Lord Chancellor directed the application to stand over until

the result of these proceedings should be known. Shortly afterward *Follett* obtained a rule *nisi* for a new trial. The motion for the injunction was now brought on again.

Lord COTENHAM, L. C., said that under the circumstances in which the case now stood at law—a rule to show cause why a new trial should not be had having been granted—he must consider the legal title of the parties as still undecided ; and he therefore refused the application.

Motion denied.

Re BODMER'S PATENT.

Privy Council, May 20, 1840.

(2 Moore Privy C. 471, 477.)

Extensions. Advertisement under 2 and 3 Vict., c. 67.

The rules enacted for practice in patent causes under 5 and 6 Will. IV., c. 88, must be observed until new rules are framed, in an application for an extension of the term of a patent presented under 2 and 3 Vict., c. 67.

Application for an extension.

The decision denying the application of Bodmer's patent (2 *ante*, p. 531), which imposed hardships upon the petitioner, led to the enactment of an act to enable the Judicial Committee to continue the hearing on an application for extension, notwithstanding the expiration of the patent pending the proceedings.

In pursuance of this act the petitioner, Mr. Bodmer, presented a fresh petition to Her Majesty in Council, and on December 5, 1839, moved by counsel for a day to be fixed for hearing the matter of his original petition for an extension of the then existing letters patent.

Their lordships were of opinion that the public were entitled to be apprised of the application intended to be made under the recent statute to enable parties to enter caveats

and lodge objections, and that as no new rules had been framed for proceeding under the recent act, those made under the former statute must be observed, and directed the petitioner to advertise his intention to apply, as required by the rules under the former act.

The petitioner having complied with this direction and the existing practice, and no caveat being entered, the petition now came on for hearing before the Judicial Committee.

Follett and *Godson*, for the petitioner, produced witnesses to prove the allegations of merits contained in the petition, and that the petitioner had not received adequate remuneration for his outlay and the ingenuity of his invention.

Lord LYNDHURST expressed the opinion of the committee, that the subject-matter of the patent was an ingenious invention, and that as the remuneration appeared from the evidence produced only to have been received for the last three years, and during that period was not of an extraordinary kind, it could hardly be said that the inventor had had sufficiently the benefit of his invention ; they considered, therefore, that they ought to grant an extension for the term of seven years.

The following is the text of the act, omitting the recital of the act amended. If any person, etc., etc., reciting the substance of 5 and 6 Will. IV., c. 88, s. 1 (September 10, 1835 ; see *ante*). And whereas it has happened since the passing of the said act, and may again happen, that parties desirous of obtaining an extension of the term granted in letters patent of which they are possessed, and who may have presented a petition for such purpose in manner by the said recited act directed, before the expiration of the said term, may nevertheless be prevented by causes over which they have no control from prosecuting with effect their application before the Judicial Committee of the Privy Council ; and it is expedient therefore that the said Judicial Committee should have power, when under the circumstances of the case they shall see fit, to entertain such application, and to report thereon, according to the provisions of the said recited act, notwithstanding that before the hearing of the case before them the terms of the letters patent sought to be renewed or extended may have expired. Be it therefore enacted, etc., that so much of the said recited act as provides that no extension of the term of letters patent shall be granted as therein mentioned if the application by petition for such extension be not prosecuted with effect before the expiration of the term originally granted in such letters

patent, shall be and the same is hereby repealed. Stat. 2 and 3 Vict. (August 24, 1839), c. 67, s. 1.

That it shall be lawful for the Judicial Committee of the Privy Council, in all cases where it shall appear to them that any application for an extension of the term granted by any letters patent, the petition for which extension shall have been referred to them for their consideration, has not been prosecuted with effect before the expiration of the said term from any other causes than the neglect or default of the petitioner to entertain such application, and to report thereon as by the said recited act provided, notwithstanding the term originally granted in such letters patent may have expired before the hearing of such application ; and it shall be lawful for Her Majesty, if she shall think fit, on the report of the said Judicial Committee recommending an extension of the term of such letters patent, to grant an extension, or to grant new letters patent for the invention or inventions specified in such original letters patent, for a term not exceeding seven years after the expiration of the term mentioned in the said original letters patent. Provided always that no such extension or new letters patent shall be granted if a petition for the same shall not have been presented as by the said recited act directed before the expiration of the term sought to be extended, nor in case of petitions presented after November 30, 1839, unless such petition shall be presented six calendar months at the least before the expiration of such term, nor in any case unless sufficient reason shall be shown to the satisfaction of the said Judicial Committee for the omission to prosecute with effect the said application by petition before the expiration of the said term (*id.*, s. 2).

ELLIOTT v. ASTON.

Common Pleas, N. P., Trin. V., 1840.

(1 Web. P. C. 222.)

Definiteness of Specification. Prior Public Use. Novelty. Infringement

The patentee must give such a description in his specification as would enable a workman of competent skill, conversant with the trade, to carry the invention into effect.

The question of public use is for the jury.

Action for infringement.

The patent was granted December 14, 1837, to William Elliott, for "improvements in the manufacture of covered buttons."

Pollock stated the plaintiff's case. The object of the invention is the manufacture of buttons with central patterns and with a covering, the face of the surface being in relief, or with covers of a nature which will not bear pressure on their surface without injury. The plaintiff weaves certain fabrics in strips, and covered with small patterns within squares, so that they may be readily cut out, but he lays no claim to such fabrics *per se*. The same or very similar fabrics have been used for making buttons in other ways, but they have never been used for making buttons with dies and pressure. In the manufacture of buttons with dies and pressure, as previously practised, there was no means of placing a pattern in the centre, and the surface was injured by being pressed on. The two objects, then, of the patent are, the producing with dies and pressure ornamental buttons, with devices accurately centred, and the application of certain fabrics never before applied in that manner to such purposes.

Of the novelty and utility of the invention there can be no doubt ; as soon as the buttons were in the market, the demand was so great that they could not be supplied fast enough. The natural and necessary consequences of the introduction of a new manufacture followed ; buttons were applied as ornaments to a great variety of new purposes, and trade was benefited in other directions.

The third plea denies the novelty of the invention. Now, the only safe course is to inquire when the article came into general public and extensive use ; if a general public use follows on the patent and the diffusion to the world of the article claimed, the presumption is that the plaintiff is the inventor.

Several witnesses were called to prove the infringement, and the sufficiency of the specification, and the novelty of the invention, and the great demand for the buttons.

W. E. Carpmael, civil engineer, testified. The first description of covered buttons was Saunders's Florentine button ; it was made with dies and pressure. There was a plate of metal which formed the shape of the face, and there was some paper, and what was called a toothed collet

used. This collet was jagged all round, so that when forced in by the dies the serrated or saw-like edge was caused to be clenched thereby against the internal plate, thereby holding the parts together. I never saw or heard of a covered button previous to Mr. Elliott's patent with a central figure made by dies and pressure. Buttons with central patterns have been made before, but it has been by sewing a piece of silk or cloth over a mould. I never heard, previous to Mr. Elliott's patent, of any buttons made with velvet, or all-over patterns made by dies or pressure.

Bompas, for the defendant, applied that the plaintiff should be nonsuited on the grounds : 1. That the invention was not the subject-matter of a patent ; 2. That if the invention was new, the specification does not describe its nature according to the terms of the objection. [The notice of objections stated, among other things, that the specification did not describe the nature of the invention, inasmuch as the heads of claim only set forth a combination of well-known inventions, not sufficient to constitute a subject-matter of letters patent.] Terry velvet and several other articles have been used to make buttons with a needle ; there is nothing new in the dies and pressure ; the claim to use these in conjunction is but a claim to use a known material in a known way, viz.: by dies and pressure, for a purpose known before, viz.: for the purpose of making buttons ; it is nothing but applying a well-known article to buttons. [COLTMAN, J. By which plea is this raised ? The pleas were : 1. Not guilty ; 2. Setting forth the specification, and averring that the plaintiff did not by the said instrument particularly describe and ascertain the nature of the said invention, and in what manner the same was to be performed ; 3. That the said invention was not new within England.] Under two, that the specification does not describe the nature of the invention as explained by the objection, and that the invention is not new—which includes two things, whether it is new and whether it is an invention. This is not an invention within the view of the patent law. [COLTMAN, J. The evidence as it stands at present is that by the old mode of manufacture the uniform pressure on

buttons is in the centre ; the novelty consists in removing the pressure from the centre to the circumference. The invention is, in substance, to make buttons in which there shall be no injury to the raised parts. The specification says, covered buttons with flexible shanks, made by the aid of dies and pressure. Terry velvet buttons could not, as the evidence now stands, without injury, be made with dies and pressure before this mode was brought forward. I shall not take the case from the jury.]

Several witnesses were called for the defendant, principally to prove the use of a similar fabric to the one claimed ; the nature of the evidence will sufficiently appear from the summing up.

COLTMAN, J. Gentlemen of the jury, the part of the invention which is said to have been infringed is that described by the words "the application of such figured woven fabrics to the covering of buttons (with flexible shanks made by pressure in dies) as have the ground, or the face of the ground, woven with soft or organzine silk for the warp, when such fabrics have ornamented designs or figures for the centres of buttons." It appears that the buttons produced are made by pressure in dies, with flexible shanks. Are you further satisfied that it is a figured woven fabric covering a button, having the ground, or the face of the ground, woven with soft or organzine silk ? The witnesses for the plaintiff have expressed a decided opinion, and have not been contradicted on this point.

The second point is whether the plaintiff has given such a description in his specification as would enable a workman of competent skill (it would not enable me, of course, to make anything of the sort, or any person who is not a person of skill conversant with the trade) to carry the invention into effect. You have heard the evidence of Mr. Carpmael and Mr. Cottam, who state that, in their opinion, any competent workman could make the plaintiff's buttons. That has not been met by any contradictory evidence to show any obscurity that would make it unintelligible to a competent workman.

The third point is whether the invention was new as to the use of it in England. It appears that Mr. Grosvenor was employed in 1837 to make silk with ornamental figures in the centre ; that about fifty-seven yards were made, and consumed on seventy gross of buttons ; that a considerable number of the buttons were sold in the market ; and the question is whether the fabric so made and employed falls within the description in the patent. If it does, then the goods which are manufactured are goods which the plaintiff attempts by this patent to prohibit the party from making ; and his patent would, therefore, if you thought these goods had been put in use publicly in England (of which the circumstance of selling them in the way described is a matter you are to consider, whether that shows a public use of them or not) be too large in its claims, and consequently invalid.

The questions, then, are, whether you are satisfied that there has been an invasion of the patent ; that the specification is sufficiently clear for an intelligent person conversant with the subject to understand the mode of working ; and whether you are of opinion that the manufacture was a new manufacture in England ; or whether, on the contrary, that a certain part of it was known and in public use before.

Verdict for the plaintiff.

*Re QUARRILL'S PATENT.***Privy Council, June 30, 1840.**

(1 Web. P. C. 740.)

Extension. Proof required.

On applying for an extension, proof of patentee's actual expenses must be made. An averment that there has been no loss or profit is not enough.

Application for an extension.

This was an application by the assignee, under an assignment from the executrix, the widow of the patentee, of letters patent granted December 20, 1826, to Thomas Quarrill, for "improvements in the manufacture of lamps."

It appeared that between six hundred and seven hundred lamps had been sold during Mr. Quarrill's lifetime at a profit of about 10s. a lamp, the selling price being about 30s.; that the petitioner had purchased the stock in trade at a fair value, and had been no loser by the transaction.

Their lordships refused the application. Their lordships also intimated that with regard to the question of remuneration, the actual expenses must be shown; to state there had been neither loss nor profit was not sufficient.

Re JONES'S PATENT.

Privy Council, July 8, 1840.

(1 Web. P. C. 577.)

General Nature of Applications for Extension. Insufficient Remuneration as a Ground. Presumption from Non-User.

Applications for extension are not granted as matter of course. The jurisdiction of the Judicial Committee is extraordinary, and is to be exercised only on the most special grounds alleged and proved in each case.

The insufficiency of the usual term to afford remuneration, regard being had to the merits of the invention and its usefulness to the public—held a sufficient ground for extension of the term.

Application for an extension.

The application was made by the assignee for an extension of the term of letters patent, granted October 10, 1826, numbered 5,415, to T. Jones, for "a certain improvement or improvements in wheels for carriages."

Campbell, Attorney-General, said that he did not intend to make any objection to the extension on the ground of any supposed want of validity, which he had reason to believe

could be satisfactorily established, having been proved on a trial at law [in *Jones v. Pearce*, 1 *ante*, 473. The grounds of the rule *nisi* for a new trial in that case do not appear in that report, but in the course of these proceedings they were stated to be : 1. No sufficient evidence of infringement, the defendant not having sold any wheel, and having one only in his possession ; 2. Misdirection, the jury having been directed that an abortive attempt to bring a principle into use did not prevent another from taking out a patent for an invention on the same principle, and bringing it into successful use.—Ed.] ; but he felt it his duty to submit that there was no reasonable prospect of its being beneficial to the patentee or his assignee, in which case the public ought not to be precluded from the use of it.

Pollock. The only way in which the public would have an immediate benefit from the invention would be by permitting the assignee to have the further use of the patent ; for if, after the loss he had sustained, he was to be driven from the trade, the invention would probably fail as far as the public were concerned, for want of that support which he alone could give.

The papers containing the advertisements were put in, also three deeds—the first conveying a fourth of the patent to Riddle, the second a fourth to Piper, and the third the remaining half to Riddle and Piper, the petitioners.

Mr. Brunel and other witnesses described the nature of the invention, and explained the superiority of iron wheels made according to the patent over other iron or wooden wheels : that the wheels of a carriage intended to move great weights—as large blocks of stone—if of wood must be nearly solid ; these were extremely liable to get out of order and shrink, and be unfit for use. The patent wheels would be much lighter than iron wheels made on the old principle—that is, supporting the weight from beneath and not from above by suspension. Considerable difficulty was experienced at first in making the tire of the wheels. The machinery had been repeatedly altered, and great expense incurred from that source and in experiments for reducing the cost of the wheels. The great difficulty was with the

tire, which did not attain its present state of perfection till within about six years. There had been no departure from the specification.

The concern on the whole had been a losing one ; the total amount of loss, exclusive of interest on the capital, during the whole term was £15,389, and with interest, £28,474 ; during the last seven years the loss has been £15,505. This loss has been principally owing to the cost of machinery, the capital expended in obtaining machinery for the different parts of the wheel ; £7,284 had been expended in machinery patterns, tools, implements, forges and premises. About 2,500 pairs of wheels had been made. The relative cost of a pair of patent iron and wooden wheels of the same size is £11 and £7, but the expense of keeping up the latter is greater than the former ; the latter will wear out in about two years, whereas the former will last four years, and when worn out several parts may be used again. The prejudice against the wheels among the makers of carts and carriages is very strong. So much difficulty had been experienced in getting the wheels applied to carriages, that the petitioners had recently taken to making the bodies as well as wheels of carriages. During the last two years considerable quantities had been exported to the West Indies and other places.

The patentee was examined as to his having any knowledge of Mr. Strutt's invention. He stated that he had never heard of anything of the kind until the trial for the infringement of his patent ; the mode pointed out in the specification is now pursued in making the wheels ; the various deviations were attempted for the purpose of saving expense, but the parties had returned to the precise mode pointed out in the specification ; the difficulty of rolling the wrought-iron rim led to the trial of cast iron, but that proved too heavy ; the present rim is of better dimensions than those made at first, and of a better kind of iron ; there is nothing in the present wheel which is not described in the specification, except some improvement in the nave for the purpose of keeping in the oil.

The Attorney-General said that he should not dispute

that the present was to be considered a valid patent, but he submitted that there was not a sufficient case made out to call for an extension of the term, there appearing no reasonable ground to suppose that a benefit would accrue to the petitioner which would counterbalance the loss to the public from the continuance of the monopoly.

Pollock. It has been made out that a very considerable part of the loss has arisen from the necessity of the patentees making their own machinery. The demand was not such as to induce the manufacturers to comply with their wishes, and they were obliged to make their own experiments, and get premises, and erect a forge for themselves. The proprietors of the patent, perceiving the great expense, and expecting that, by diminishing the cost or by having a more perfect article to sell, they would be more successful, went on making experiments, but eventually returned to the specification, and expect that by an extension of the term they shall be enabled to retrieve a part of their loss.

Lord BROUGHAM. It is perfectly true, as has been stated, not only upon this but upon former occasions, that these applications are anything rather than matters of course. This is a very extraordinary jurisdiction which has been conferred on the Judicial Committee by the Legislature, and is to be exercised only on the most special grounds alleged and proved in reference to each case. Their lordships are of opinion that in this case the grounds are most decisive, and have been proved in a most satisfactory manner. From the nature of the invention it appears to be hardly possible that, within the ordinary period of time, ten, twelve or fourteen years, a remuneration could be expected. In this case it is clearly proved, not only that there was no remuneration, but that every year a very heavy loss has been sustained. Under these circumstances their lordships are of opinion that unless they give the whole term of seven years, there is no reasonable chance of that loss being counteracted by the profit to the parties now in possession of the patent. Their lordships are therefore of opinion that

in the circumstances of the case, and regard being had to the merits of the invention and its usefulness to the public, the whole period of seven years' extension should be granted.

Report accordingly.

EXTENSION.—1. *Mode of proceeding* in case of application for extension is given by the Statute 5 and 6 Will. IV., c. 88, which statute is cited generally in 2 *ante*, pp. 185, 229, 419, 454, 480, 490, 501, 532 and 535. 2. *Grounds for extension* are indicated clearly by the decisions in the following cases: A very strong hardship should be made out as well as a strong case upon the utility of the invention (*Re Erard's Patent*, 2 *ante*, 182). In *Ex-parte Russell* (2 *ante*, 532), extension was granted on ground of great merit and utility and inadequate remuneration occasioned in great measure by expenses of litigation which assignee had been involved in for the protection of his patent rights. In *Swaine's Patent* (2 *ante*, 482), invention being very meritorious, result of much labor, care and science, and extremely useful, and patentee having sustained loss in introducing same to public use, it was held, that patent should be extended for seven years. In *Re Southworth's Patent* (2 *ante*, 404), the misfortunes of the patentee and those connected with him in the management of the patent, together with the nature of the invention being such that it would not be likely to come into immediate use, were held grounds for an extension. In *Re Stafford's Patent* (2 *ante*, 512), extension was recommended, patentee having experienced great opposition from existing interests, and being a loser by the invention.

MUNTZ v. VIVIAN.

Chancery, V. C., Nov., 1840.

(2 Web. P. C. 87.)

Evidence of Infringement. Injunction.

Injunction refused where there appeared to be a material difference between the process used by the defendants and that claimed by the plaintiff.

Suit for injunction.

The patent in question was granted to G. F. Muntz, dated October 22, 1832, numbered 6,325, for an "improved manufacture of metal plates for sheathing the bottoms of ships."

The specification stated: "I declare my invention to con-

sist in making plates for sheathing of an alloy of zinc and copper in such proportions and of such qualities as, while it enables the manufacturer to roll the metal into sheets less difficult to work, renders the sheathing less liable to oxidation than ordinary copper, though it oxidates sufficiently to keep the bottom of the vessel clean.

" I take that quality of copper known in the trade by the appellation of 'best selected copper,' and that quality of zinc known in England as 'foreign zinc,' and melt them together in the usual manner, in any proportions between fifty per cent. of copper to fifty per cent. of zinc, and sixty-three per cent. of copper to thirty-seven per cent. of zinc, both of which extremes and all intermediate proportions will roll at a red heat; but as too large a proportion of copper increases the difficulty of working the metal, and too large a proportion of zinc renders the metal too hard when cold, and not sufficiently liable to oxidation to effect in the best manner the intended purpose, I prefer the alloy to consist of about sixty per cent. of copper to forty per cent. of zinc. This compound I cast into ingots of any convenient weight, and then heat them to a red heat, and roll them in the same manner as copper is rolled hot, only taking care not to overheat the metal so as to produce fusion, and not to put it through the rollers after the heat has left it too much, say, when the red heat goes off, otherwise it will split. If the surface of the sheet when brought from the hot rollers should not be thought fine or smooth enough, I leave the sheets from the hot rollers rather stronger than required, and afterward roll them cold to the proper size. After the sheets are finished they must be well annealed, and then cleaned with a mixture of sulphuric acid and water, from which they should be well washed in clean water, and then dried.

" Now, whereas it is evident that the said alloy may also be made from a compound of copper and calamine by cementation, taking care that the quantity of calamine shall be such that the zinc extracted from it will be in some of the same proportions to the copper as before mentioned; but as it is very difficult to make the copper take up the

necessary quantity of zinc by this process, it is more expensive. It is equally evident that brass of very good quality, with the addition of zinc requisite to make the proper proportion of copper and zinc, will likewise roll hot, and answer the purpose, but is again a more expensive mode.

"But, whereas I claim as my invention the manufacture of metal plates or sheets, for the purpose aforesaid, of an alloy of copper and zinc in such proportions as will enable the manufacturer to roll the said alloy while at a red heat into sheets fit for the sheathing of ships or other such vessels, and which will be sufficiently ductile to dress close to the bottoms of the said vessels, at the same time that it is more durable than the copper sheathing now in use, and oxidates sufficiently to keep the said bottoms clean."

The bill filed October 25, 1840, by the plaintiff and Messrs. Grenfell, prayed for an injunction to restrain the defendants from infringing the plaintiff's patent.

The plaintiffs charged "that the invention for which the said letters patent were granted does not consist in the mere manufacture of metal or brass in the ordinary mode by the alloy of zinc and copper in such proportions as will alone effect such purpose of metal plates which may be rolled into sheets at a red heat, and thereby rendered applicable for the sheathing of ships and vessels." And further, "that brass made in the ordinary mode, or in any other mode than by an alloy in the proportions stated in the said specification, is not and cannot be made applicable to the sheathing of ships and vessels, inasmuch as the same cannot be rolled excepting when cold, which, added to its oxidating too fast, gives it no advantage over copper."

Motion for an injunction was now made, supported by an affidavit from Mr. Muntz as to the originality of the patent. The defendants filed affidavits in opposition, in which they stated that they had long before the patent manufactured brass sheets within the proportions specified in the patent, but that they rolled them cold. Mr. Muntz, in his affidavit in reply, stated "that he did not claim, nor ever pretended to claim, the manufacture of brass or pinchbeck in the pro-

portion of sixty per cent. of copper to forty per cent. of zinc applied to ordinary purposes, or any proportions otherwise than and except the application for the sheathing of ships."

SHADWELL, V. C., said that although he would not then put any construction on the patent, it was impossible not to see that the rolling hot was a material feature in the invention ; and as the defendants did not roll hot, he would not grant the injunction, but would leave the plaintiff to his action.

Injunction refused.

PERRY v. MITCHELL.**Exchequer, Mich. T., 1840.**

(1 Web. P. C. 269.)

In what Cases Particulars of Infringement will be ordered.

Motion to require plaintiff to deliver particulars of infringement.

This was an action for the infringement of two letters patent, of January 28, 1832, and November 19, 1833, for improvement in pens, and the specification set forth and described thirteen different pens, containing an indefinite number of slits and adjustments. The declaration assigned as breaches the making, etc., pens and nibs, in imitation of parts of the said invention, with divers additions thereto and subtractions therefrom.

Petersdorff, for the defendant, on affidavit of the above circumstances, and that inasmuch as neither the parts nor the additions or subtractions were mentioned, it would be impossible to prepare the notice of objections to be delivered with the pleas, or to know what evidence to adduce, obtained a rule calling on the plaintiff to show cause why the plaintiff should not deliver particulars in writing of the in-

fringements on which it was intended to rely, and specify and point out the particular pens shown in the drawings annexed to the specification, in respect of which such infringements had taken place.

Pollock showed cause, and cited *Crofts v. Peach* (2 *ante*, p. 247).

The court made the rule absolute, and ordered the plaintiff to give particulars by the number of the pens on which infringements were alleged. The following notice was given accordingly : “The pens to which the declaration in this cause refers, and the numbers of such pens in the specifications referred to in the declaration, are as follows” (setting forth the numbers and figures of the diagrams).

Mr. Webster, commenting upon this and the preceding cases, says (1 Web. P. C. 269, *note*) : “It should be remarked that the applications are not in pursuance of any statute, but to the general jurisdiction of the court.”

Re SHARP'S PATENT.

Chancery, M. R., Dec. 22, 1840.

(1 Web. P. C. 641.)

Memorandum of Alterations under 5 and 6 Will. IV. c 83, s. 1. Jurisdiction to amend Memorandum.

The Master of the Rolls has no jurisdiction to remove from the records of the Court of Chancery a memorandum of alterations of the specification, enrolled under 5 and 6 Will. IV., c. 83, s. 1.

Except for the purpose of correcting mere verbal or clerical errors proved to have arisen from mistake or inadvertence, the Master of the Rolls has no authority to make any alteration in the enrolment of the patent or of the specification.

If the memorandum goes beyond the act (above) it is void, and cannot be given in evidence or made any use of.

Petition to correct a memorandum of alterations of a specification enrolled under 5 and 6 Will. IV., c. 83, s. 1, by J. Sharp.

This was an application on behalf of J. Wordsworth, made to the Master of the Rolls, as Keeper of the Records of the Court of Chancery, to remove from the rolls of that court a memorandum of alteration, which had been duly enrolled under the authority of the fiat of the Solicitor-General, according to the provisions of the statute 5 and 6 Will. IV., c. 83, s. 1.

Letters patent, dated October 8, 1836, had been granted to John Sharp, of Dundee, for "certain machinery for converting ropes into tow, and certain improvements in certain machinery for preparing hemp or flax for spinning; parts of which improvements are also applicable to the preparing of cotton, wool and silk for spinning." The specification was duly enrolled April 8, 1837. In the same year Mr. Sharp obtained letters patent for Scotland for the same invention. On May 31, 1838, letters patent were granted to the petitioner Joshua Wordsworth for "improvements in machinery for heckling and dressing flax, hemp and other fibrous materials," the specification under which was duly enrolled November 30, 1838.

On August 18, 1838, a petition was presented to Sir R. M. Rolfe, Her Majesty's Solicitor-General, for leave to enter a memorandum of alteration in the specification of Mr. Sharp's English patent. The Solicitor-General ordered advertisements to be inserted in the *Gazette* and two London papers, and in a Scotch newspaper circulating in the neighborhood of the residence of the patentee; which, having been done on September 8, he granted the fiat for enrolling the said memorandum of alteration, which was enrolled accordingly on September 20, 1838.

The petitioner alleged that certain portions of the said memorandum of alteration described a new machine or arrangement of machinery, and extended the exclusive right granted by the letters patent, and was in substance the same machinery as had been invented by the petitioner and described in the specification of his patent; and prayed that such portions might be expunged from the said memorandum of alteration and the rolls of the court.

Russell applied for an order *ex parte*, as on the default

of the respondent, and tendered an affidavit of service of a copy of the petition on the respondent in Scotland, and submitted that this being a case under the new act was without precedent ; and unless such service were accepted, there could be no means of serving parties out of the jurisdiction of the court.

Lord LANGDALE, M. R. That might be a very good ground for an application for substituted service, but not for such service as has been made. Have the respondents employed no agent in London, in preparing and filing the memorandum, on whom service might be ordered ? Is not the memorandum void if, as the petitioner contends, it exceeds the limits of the act ; and what more can the petitioner want ?

Russell. The existence of the memorandum upon the rolls of the court gives the party a *prima facie* right, which is a grievance to the petitioner and others, who ought not to be driven to a more expensive remedy. The court has power over its records, and has been in the habit of exercising jurisdiction over any alterations in them ; the present is a corruption of the rolls of the court.

Lord LANGDALE, M. R. You have a plain and easy remedy elsewhere. If the memorandum goes beyond the act, as you say, it is void, and could not be given in evidence or made any use of. If it was a specification under the old law, what jurisdiction should I have to take it off the roll ? If I were to decide that this memorandum is void, and to order it to be taken off the roll, and it turned out that it was not so, what situation would the patentee be in ? I might be depriving him of his patent. I apprehend I have no discretion about receiving a memorandum when it has been sanctioned by the Attorney or Solicitor-General ; and therefore how could I make an order which would have the effect of depriving a patentee of his rights under the act ? At all events, I can make no order on the present service.

On a subsequent day, on affidavits stating who had acted as agents in this country for the patentee, an order was obtained for amending the petition, and that personal service

of the amended petition on the patentee and his agent might be deemed good service.

Pemberton and *Russell* appeared in support of the amended petition. The alteration in the specification is one which the act of Parliament does not warrant. The act expressly provides that the alteration shall not be such as to extend the exclusive right granted by the letters patent ; but in this case the right is extended in such a manner as to infringe upon the rights of the petitioner, and against this he is entitled to relief. The statute provides that the memorandum of alteration in the specification shall be taken as part of the letters patent and specification in all courts whatever. If this alteration, one unwarranted by the statute, is to be considered as part of the records of the court, then this court has jurisdiction to expunge the irregular entry on its rolls. The records of the different courts have always been subject to their jurisdiction and authority, and if the court finds they are not in the state they ought to be, it will correct them. This was done by Sir J. Leach in Redmund's Case (*1 ante*, p. 397), where an error in the enrolment of a specification was ordered to be corrected. The legislature could never have intended that the Attorney and Solicitor-General should have an uncontrolled authority to order any alteration whatever in a patent, or to direct any entry they pleased on the rolls of the court ; for if they are to decide conclusively without giving parties, in whose absence they decide, the power of appealing, and a fiat of the Attorney or Solicitor-General should be obtained by fraud, accident or mistake, there would be no means of correcting the error. There is no other jurisdiction to which this application can be made, and if this court ever had jurisdiction to correct its own records, it can only be taken away by express enactment. [Attorney-General *v.* Aspinall, 2 Myl. & C. 613 ; Attorney-General *v.* Norwich, *id.* 430 ; Attorney General *v.* Poole, 4 Myl. & C. 17 ; Attorney-General *v.* Wilson, 1 Cr. & Ph. 1.] There is no exclusion of the jurisdiction of this court in the statute in question ; it must, consequently, still remain. The court, therefore, has authority to control the discretion of

the Attorney and Solicitor-General, and to judge whether, under the act of Parliament, the memorandum is such as to be proper to be added to the record.

Again, the Attorney or Solicitor-General is only authorized to sanction such a memorandum as does not extend the patent. Here the memorandum does extend the patent. The act of Parliament, therefore, does not apply, and the amendment may be treated as surreptitious, and as forming no part of the rolls. It will be said that, in this view of the case, the petitioner will not be prejudiced, as on the trial of an action at law the fact will appear that the alteration was unwarranted ; but the act expressly provides that the alteration " shall be deemed and taken to be part of such letters patent or specification in all courts whatever" [see *Perry v. Skinner*, 2 *ante*, p. 454, in which case it was held that where a patent is originally void, but amended under 5 and 6 Will. IV., c. 83, by filing a disclaimer of part of the invention, that act has not a retrospective operation, so as to make a party liable for an infringement of the patent, prior to the time of entering such disclaimer] ; the altered specification will, therefore, be conclusive. Independently of this, the petitioner has a right to try an action without these words ; and as, where a deed or other instrument forms a cloud over the title of a party, this court will order it to be delivered up, so here the court will relieve the petitioner from the effects of an improper entry on the records of the court made in his absence.

Hill and *Bacon*, for the respondent. The Master of the Rolls has no jurisdiction to do what is asked by the petitioner. The alteration is not even a record in its strict sense, and if it were, the Master of Rolls, sitting as the Keeper of the Records, has no power to expunge an alteration sanctioned by the proper authority ; his jurisdiction in this respect is confined to the amendment of clerical errors. The principle adverted to as established by the decision on the Municipal Corporation Act, that an old jurisdiction is not excluded by the erection of a new tribunal, may be conceded to the petitioner, but before the statute authorizing the enrolment of a memorandum of alteration this court had no

jurisdiction whatever on the subject. The right of disclaimer, and of effecting an alteration in the title and in the specification, was a new creation, for the determination of the questions regarding which the legislature created a special tribunal, from which there was no appeal to this court. If this court could re-hear the decision of the Attorney or Solicitor-General, the same right would extend to any decision of the Judicial Committee of the Privy Council, on the matters submitted to their jurisdiction by the statute. The Master of the Rolls is only a ministerial officer in these matters ; as the Keeper of the Records, he is bound to receive and keep whatever is duly authorized.

Lord LANGDALE, M. R. (after stating the facts). The petitioner complains of this proceeding as injurious to him, as it undoubtedly is, if the facts be as alleged ; and he prays that such portions of the memorandum in Sharp's specification as are set forth in his petition, and are in substance descriptive of the machinery invented by the petitioner, may be expunged from the memorandum of alterations and the rolls of the court.

The question now is whether, supposing the facts to be as alleged, I have authority to do what is asked, and I am very clearly of opinion that I have not. Patents for inventions are granted on condition of a specification of each invention being enrolled in a limited time, and except for the purpose of correcting mere verbal or clerical errors, proved to have arisen from mistake or inadvertence, I am of opinion that I have no authority to make any alteration in the enrolment of the patent or of the specification. The party enrolling his specification does it at his own peril ; and if in his specification he expresses something by which his patent is rendered invalid, he must submit to all the legal consequences ; and those who have a right to take advantage of any error of his must do so in a legal course ; they cannot require the Keeper of the Records or Rolls to alter that which the patentee has claimed or disclaimed in his specification, and compel him by such enforced alteration to say something which he never intended to say.

There were very good reasons for relieving patentees from some of the risks and difficulties to which they were liable from errors in their specifications ; and the statute 5 and 6 Will. IV., c. 83, authorized disclaimers and memorandums of alterations to be filed and enrolled with the leave of the Attorney and Solicitor-General ; and enacted that when filed and enrolled the same should be deemed and taken to be part of such letters patent and specification, *i.e.*, as the act has been expounded [in the case of *Perry v. Skinner*, 2 *ante*, p. 454], shall be deemed and taken to be part of the letters patent or specification, from the time of filing the memorandum of alteration. And considering the memorandum of alteration as now being part of the specification, I conceive that it ought to be dealt with as such and no otherwise. If it were alleged that the enrolled memorandum of alteration, by mistake of the writer, contained verbal or clerical errors, by means of which something was enrolled contrary to the true intent of the party, and if sufficient evidence were given of the fact, I should think myself authorized by precedent to correct the error, and make the enrolment accord with the proved intention of the party at the time of the enrolment. But it has never been supposed that the Master of the Rolls, as Keeper of the Records, had authority to permit or to order an erroneous claim to be expunged or amended. The party may have claimed too much, and thereby made his patent good for nothing, or may have omitted to claim something which he was justly entitled to ; but on such grounds the Keeper of the Records could not interfere on his behalf or at his instance ; and I apprehend that no attempt has ever been made to induce the Keeper of the Records to expunge by his authority some claim which the patentee desired to sustain, and was willing to defend in due course of law.

Under the late statute, the disclaimer is not to be such as shall extend the exclusive right granted by the letters patent. But the Keeper of the Records, as such, has no authority to decide whether there is any extension ; nor has he, in that character, any means of investigating the truth and justice of the case. It is no part of his duty, when he

receives the enrolment into his custody, to consider whether the Attorney or Solicitor-General has improperly given leave to file the memorandum, nor can he afterward determine any such question.

I delayed my decision in this case for the purpose of inquiring what had heretofore been done in the amendment of enrolments in this court; and from the information which I have received it would seem that it has always been usual to amend clerical errors. When errors have been made in grants, as was said, "per incuriam et ex inani inadvertentia scriptoris," they have been amended by the Master of the Rolls; sometimes under the authority of a warrant from the Crown, sometimes with the consent of the Attorney-General, sometimes in consequence of a reference to him by the Lord Chancellor; and there is an instance of an amendment being made by an order of the Lord Chancellor, pursuant to an order of the king. The errors have been proved and rectified by comparison with the writ of Privy Seal, or with the signed bill, or with the original grant.

At an early period the enrolment of the acknowledgment of a deed was amended at the request of the grantor, who had acknowledged it. I have not been supplied with any early instance of amending the specification of a patent invention, but the recent instances of such amendments have been of this kind: In a case before Lord Gifford in 1824, the word "wire" had been written instead of "fire," and he ordered the specification to be amended. *Re Whitehouse's Patent* (1 *ante*, p. 428). In the case of *Re Redmund*, 1 *ante*, p. 398, an erroneous transposition of numbers was amended by order of Sir John Leach, who, in a subsequent case, ordered to be amended two errors, by one of which the word "which" was written instead of "wheel;" and by the other of which, the word "increase" had been written instead of the word "inverse." I have had similar cases before me in which there have been errors more or less numerous, but all of the same kind. And in every case which has occurred it has plainly been intended to do no more than amend mere slips or clerical errors made

by the parties, or the agents of the parties, who, intending to make an accurate enrolment, have by mere inadvertence made an enrolment which was not what it purported to be, a true statement of that which the party intended at the time ; and not only has strict evidence of error been required, but in order to enable any third party to dispute the validity of the amendment and of the order, it has been directed that the order itself should be endorsed on the enrolment.

It does not appear that the Master of the Rolls, as Keeper of the Records in Chancery, has ever exercised any greater authority than I have stated in matters of this kind ; and being of opinion that I have no jurisdiction to make any such order as is asked by this petition, I must dismiss the petition with costs.

Petition dismissed.

The following was the form of the fiat in the above case : " To the Clerk of the Patents for England. This is to certify that John Sharp, of Dundee, in the county of Forfar in Scotland, flax-spinner, hath applied to me for leave to enter with you the above written memorandum of alteration of part of the specification of a certain invention, for which letters patent were duly granted to him under the great seal, dated at Westminster, October 8, 1836, the specification of which was duly enrolled on April 8, 1837 ; and on considering the said application I directed him to advertise his said alterations in the *London Gazette*, and in the *Times* and *Morning Chronicle*, and the *Dundee Courier*, newspapers. And such advertisements have been duly made in the *Gazette*, *Times* and *Morning Chronicle*, on August 24 last past, and in the *Dundee Courier* of the 28th day of the same month, and no objection having been made to the said application, I have accordingly granted leave to the said John Sharp to file his said memorandum of alterations, pursuant to the statute passed in the sixth year of the reign of his late Majesty, entitled ' An act to amend the law touching letters patent for inventions.' — Signed R. M. ROLFE."

In *Re* Whitehouse (1 *ante*, p. 428) a patent dated February 26, 1825, "for improvements in manufacturing tubes for gas and other purposes;" by the order, made January 13, 1830, of the Master of the Rolls, on the petition of James Russell, stating the error to be a clerical one, and to have arisen in the engrossment of the specification, as appeared by the original draft from which the engrossment was made, and on the affidavit of the agent, it was ordered "that the proper officer do amend the original roll or entry of the said specification remaining of record in the Enrolment Office of this court, by altering the letter 'w' in the said word 'wire' to the letter 'f,' so that the same may read 'fire.'" In *Re* Rubery's Patent, granted November 14, 1837, for "certain improvements in the manufacture of part of the furniture of an umbrella," the specification recited the letters patent to have been granted in "October" instead of "November." Lord Langdale, M. R., ordered the amendment as prayed. (1 Web. P. C. 649, *note*.) In both these cases the petition stated that no scire facias to repeal the patent, or other proceedings at law on the patent, had been instituted. In *Re* Redmund (1 *ante*, p. 397) the petition stated that within the last month the petitioner had discovered that the copying clerk, in engrossing the specification and the plan annexed to it, had by mistake transposed the numbers by which in the specification reference was made to the plan, and that no office copy of the specification had been taken. The petition prayed that this clerical error in the enrolment might be amended. Ordered as prayed.

NEILSON v. THOMPSON.

Chancery, V. C., Dec. 24, 1840.

(1 Web. P. C. 275.)

Evidence of Patentee's Right. Infringement. Injunction Pending Suit.

Enjoyment for twelve years, held to make a *prima facie* case for injunction.
Evidence of infringement.

Bill for injunction against infringement.

The patent was granted September 11, 1828, numbered 5,701, to J. B. Neilson, "for the improved application of air to produce heat in fires, forges and furnaces, where bellows or other blowing apparatus are required."

The specification was as follows : "A blast or current of air must be produced by bellows or other blowing apparatus in the ordinary way, to which mode of producing the blast or current of air this patent is not intended to extend. The blast or current of air so produced is to be passed from the bellows or blowing apparatus into an air vessel or receptacle made sufficiently strong to endure the blast, and through or from that vessel or receptacle by means of a tube pipe or aperture into the fire, forge or furnace. The air vessel or receptacle must be air-tight, or nearly so, except the apertures for the admission and emission of the air, and at the commencement and during the continuance of the blast it must be kept artificially heated to a considerable temperature. It is better that the temperature be kept to a red heat or nearly so, but so high a temperature is not absolutely necessary to produce a beneficial effect. The air vessel or receptacle may be conveniently made of iron, but as the effect does not depend upon the nature of the material, other metals or convenient materials may be used. The size of the air vessel must depend upon the blast and on the heat necessary to be produced. For an ordinary smith's fire or forge, an air vessel or receptacle capable of containing

twelve hundred cubic inches will be of proper dimensions, and for a cupola of the usual size for cast-iron founders, an air vessel capable of containing ten thousand cubic inches will be of a proper size. For fires, forges or furnaces, upon a greater scale, such as blast furnaces for smelting iron and large cast-iron founder's cupolas, air vessels of proportionably increased dimensions and numbers are to be employed. The form or shape of the vessel or receptacle is immaterial to the effect, and may be adapted to the local circumstances or situation. The air vessel may generally be conveniently heated by a fire, distinct from the fire to be affected by the blast or current of air, and generally it will be better that the air vessel and the fire by which it is heated should be enclosed in brickwork or masonry, through which the pipes or tubes connected with the air vessel should pass ; the manner of applying the heat to the air vessel is, however, immaterial to the effect, if it be kept at a proper temperature."

In the subsequent proceedings on the above, as well as on Crane's patent, the following inventions relating to the application of air to furnaces are frequently referred to :

Letters patent, January 2, 1828, to Thomas Botfield, for "certain improvements in making iron, or in the method or methods of smelting and making iron."

Specification. "I, the said Thomas Botfield, do hereby declare that the following is a particular description of the nature of my said invention, and methods and improvements in the smelting and making of iron, both in respect to principle, and the way and manner in which the same may be performed—that is to say, the principle is for causing or obtaining a blast of atmospheric air sufficient to smelt, fuse, run or make pig, cast or crude iron, from iron-stone or ore. This blast is to be produced by means of rarefied air, gas, flame or heated air, from an oven or fireplace, and is to be applied in or to a blast furnace, cupola or air furnace ; this I propose to effect by the draught of a powerful chimney or chimneys, which may be built separate at any distance that may be most convenient, or may join to or be made part of the blast furnace or cupola, as may be

found most desirable and best to answer the purpose required, and which is to be connected by a flue or flues with the cupola, blast or air furnace ; but in case this draught should not prove sufficient for the purpose of smelting the iron-stone or ore, I propose and intend to apply and use the common blast from machinery to assist the blast from the draught of the chimney ; this is to be used at the same or any other twire. And I claim a right and mean to use the atmospheric air, either separate or mixed with gas, flame or heated air ; I also claim as part of my patent the right to use and mix (with other materials) rock salt, common refuse or other salt, in any state or degree of refining, or any other substance of which soda (the mineral alkali) forms a part ; this is to be mixed in the blast furnace, cupola or air furnace, with the iron-stone or ore, and with the other usual materials of coke, or charcoal and limestone, to which cinder (produced in the processes of converting pig, cast or crude iron into malleable iron) may be added. And I propose to mix the salt or other substance containing soda in such proportions as I shall find necessary to cause the iron-stone or ore to melt or fuse sooner, or with less blast, fuel or heat. Now I do hereby declare that the before-mentioned principles comprehend the real object of my patent ; and in order for the better understanding the method or methods in which the aforesaid may be reduced and applied to practical use, I wish to be understood, that although I may vary the mode, way and manner by a variation of applications to produce the said effects, and maintain the main purpose intended as circumstances may require, yet I principally propose to adhere to the method or methods herein described, which may be understood from the annexed drawing and description thereof."

The specification then describes the drawing, which shows a tall chimney on one side of the ordinary blast furnace, and connected with it by flues at the top and at the bottom.; on the other side an oven or fireplace, with a flue to admit the air from the oven or fireplace to the twire ; also a passage along the top of that flue for the atmospheric air to the twire ; the top of the blast furnace was provided with a

cover, to be removed when the furnace was charged, and proceeds as follows :

" And I do hereby declare that the blast furnace, air furnace, cupola and oven, with the chimney or chimneys, may be built, erected or made of any height, shape, form or size that shall be found most suitable to the materials to be used or smelted, and be connected by flues in any way, and may be constructed of any material or materials which may be found best suited for the purpose. And I further declare that I propose to use coal, coke, stone, coal culm, wood, charcoal or any other kind of fuel or fuels, or combination of fuel, in any proportion or proportions, in the fireplace, oven or air furnace, for producing the gas, flame or heated air, and also to use all the materials before recited, in any proportion or proportions that may be found sufficient and best adapted to produce the main object required. I claim as my patent the use of the additional chimney or chimneys, and the application of rarefied air, gas, flame or heated air, to, at or near the wire or twires of the blast furnace or cupola, to cause or assist the blast of atmospheric air. And I also claim, as part of my patent, the use of salt, or any other substance containing soda, to mix with the iron-stone or ore, and other materials in the blast, cupola or air furnace, to cause those materials to melt or fuse sooner, more easy, or with less blast and fuel. But I do not claim as my patent the use of salt in any part of the process of making bar, wrought or manufactured iron, from pig, cast or crude iron, but only claim the use of salt, or any other substance containing soda, in making pig, cast or crude iron from iron-stone or ore."

The object of the above invention would appear to be the obtaining, by means of the chimney and the hot air from the oven, such a draught as would render the ordinary blowing apparatus unnecessary. It was contended, in argument in the subsequent proceedings, that the above was in fact the application of hot air to a blast furnace, and that Neilson's patent would consequently be void, except as for the particular mode, or as an improvement on Botfield's. In the course of the argument Lord Cottenham, L. C., re-

marked, "It appears to me that Mr. Botfield, though he certainly use hot air, uses it for the purpose of increasing the draught, not for any chemical purpose the hot air might have. It leads rather to the conclusion that at that time the advantage of hot air was not known, at all events not known to him, or otherwise he would have specified it." Upon this state of facts the question arises whether the user of hot air in a blast furnace for such mechanical purpose would in law vitiate a subsequent patent for the invention of its use for a chemical purpose.

Three other inventions were referred to as applications of heated air. Sadler's, in 1798, for disengaging oxygen gas, and applying it to the best advantage. He remarks that the first effect of bringing cold oxygen in contact with a combustible body at a high temperature must be to reduce the intensity of combustion ; and he proposes an arrangement for heating the oxygen, and applying it so heated. It refers to experiments in the laboratory, not to manufactures.

Chapman's, in 1825, for consuming the smoke of steam boilers. He excludes all cold air from the furnace, and heats the admitted air by making it pass along the interior of the bars of the grate, which are cast hollow for the purpose.

Stirling's patent, in 1817, for diminishing the consumption of fuel. His invention relates, 1. To certain arrangements for heating and cooling liquids, airs or gases, and other bodies, by abstraction of heat from one portion of such liquid, etc., and communicating it to another ; and, 2. To obtaining a new motive power. He does not propose to blow heated air into furnaces, but the air enters in the ordinary state of the atmosphere.

The bill, filed December 3, 1840, stated the grant of the letters patent, the enrolment of the specification, the partnership of the plaintiff Neilson with certain persons ; that the defendants, carrying on the business of iron-masters, in the year 1839 adopted the use of the plaintiff's invention, and by and with the use of the same smelted large quantities of iron ; the plaintiffs being willing to permit them to make a trial of the benefits of the said invention

before they should be called upon to pay for the use thereof, allowed the defendants to try the said invention ; that the said defendants did so accordingly, and having found the same to be advantageous and beneficial, continued the use thereof hitherto ; that after the defendants had had a fair and sufficient trial of the said invention, the plaintiffs expected the defendants would make the plaintiffs the same payments for the use thereof which plaintiffs have demanded and received from all other persons using the same, viz., one shilling per ton ; that it was fully understood by plaintiffs that defendants would make such payments accordingly, and would take a license under seal from plaintiffs, upon the terms granted to other persons ; that no license was in fact taken. That plaintiffs have called on defendants for an account of the iron smelted by the use of the said invention, that plaintiffs and defendants might arrange the sum payable, and have frequently requested the defendants to pay the one shilling per ton, but that defendants, under various pretences, have evaded complying with the said request, and have not paid any sum in respect of such use of plaintiffs' invention ; and although plaintiffs have given notice to defendants to desist from using the said invention, they persist in using the same.

The bill prayed an injunction to restrain the defendants from any further using or exercising of the said invention, or from smelting or causing to be smelted any iron whatever, by the use of, or on the principle of, the said invention, or any part thereof, or otherwise in infringing the said patent, and from selling and disposing of any iron so smelted during the term thereof.

There were affidavits by Mr. Neilson, verifying the statements in the bill [the affidavit did not state his belief at the time of swearing it, that he was the true and first inventor, or that the invention was new at the time of the granting the letters patent. This omission was urged as an argument against granting the injunction, but it was said in reply that this was not necessary in applications for an injunction upon notice, the doctrine of Hill *v.* Thompson, 1 *ante*, pp. 285, 299, applying only to cases of application

ex parte for an injunction] ; by Mr. Mushett, verifying certain documents, and as to the said invention being in use at defendants' furnace ; by Mr. Blunt, the plaintiffs' solicitor, stating the preparation and granting of between fifty and sixty licenses by plaintiffs to iron-masters, and the payment of one shilling per ton ; also various infringements by parties in 1832, who submitted and took a license on proceedings being commenced against them ; and among others the Dowlais Company, in 1836, began to use the invention, and an injunction having been obtained, agreed to take a license, and paid the license dues for all iron made up to June, 1839, but refused to pay the license dues since that period, and that an action was pending against them.

Other affidavits set forth the number of parties who were paying license money.

For the defendants, the affidavit of Mr. Thompson stated his partnership in the Pendarran Works ; that in 1838 they began to erect the necessary works for heating one blast furnace with hot air, and in 1839 for a second ; that Neilson's mode, as described in the specification, was a failure, and that a different mode was adopted by most of the iron-masters in Scotland ; that use of hot air in blast furnaces was known before the date of the patent, and used by Bottfield and others ; that the patent is disputed in Scotland, and that those persons who had taken licenses from the patentee had been greatly hampered thereby ; that he received information from Scotland that Neilson's invention had been used by a smith for eight fires twenty years ago. The affidavit then described the mode used by defendants, and stated it to be substantially different from that described by Neilson.

SHADWELL, V. C. It seems to me, on these affidavits, that it is sufficiently made out that there has been a use of the patent in this sense, that the right of the patentee to the benefit of the patent has been submitted to where there has been a contest, and it does not at all appear to me that the general way in which the defendants on their affidavit state the mode by means of which the plaintiffs succeeded

in establishing the patent, is at all an answer to the two cases which are stated in Mr. Blunt's affidavit. Then I have the case of a patent having been obtained in the year 1828, and actually enjoyed by the patentee for upward of twelve years. *Prima facie*, I apprehend that gives a right to the patentee to come into court in a case in which he can show an infringement; and the question is, has there been an infringement? Now, I do not mean to give any opinion upon the validity of the patent in the abstract; but it is plain to me, upon the specification and upon the patent as stated in the plaintiffs' affidavits, that the patent is taken out for the invention of the application of hot air to furnaces; but inasmuch as the terms of the patent required that there should be a specification of what the invention was, and of the manner in which it was used, thereby the consequence follows that the specification commenced in these words: I hereby declare that the nature of my said invention for the improved application of air to produce heat in fires and forges, and so on, and the manner in which the same is to be performed, is particularly described; and then he goes on to state what it is, and the thing seems simple enough. The invention, as I understand it, is the invention of driving hot air on the furnace. Now, I have attended to the statement which is made in the defendants' affidavit, and I must say that it really does appear to me that their affidavit does represent that what they are doing is the thing which the plaintiffs claim as their invention. I am not now entering into the question whose invention it was, but substantially it appears to me that that which is claimed by the defendants is the thing which is in a general, simple, inartificial manner, disclosed by the plaintiff's specification; and although there seems to be a vast deal of improvement, according to what the defendants represent, in the mode in which they apply the air with respect to the mode of bringing it into the furnace, and with respect to communicating the greater heat to it than it otherwise would have, according to the simple mode contained in the plaintiff's specification, my present opinion is that their affidavit does amount to an admission that there has been

an infringement ; at least, quite enough for this court to act upon in this way—namely, that I think the court ought to grant the injunction, but put the plaintiffs on the terms of trying the question by bringing an action, which I think they are bound to do.

Order accordingly.

A similar order was made in *Neilson v. Harford*, *Neilson v. Fothergill*, *Neilson v. Homfray*, the principal facts of these cases being nearly the same as in the preceding. The circumstances peculiar to the second case will be seen in the report of the appeal before the Lord Chancellor (*post*, January 21, 1841). It was arranged between the parties that the defendants undertaking to keep an account, the injunction should not be put in force until an appeal had been heard.

GILLET *v.* GREEN.

Exchequer, Jan. 12, 1841.

(7 Mee. & W. 347.)

Costs. Certificate for increased Costs.

An action on the case for the infringement of a patent is within the operation of the 3 and 4 Vict., c. 24, s. 2 ; and notwithstanding the provisions of the 5 and 6 Will. IV., c. 83, s. 8, the plaintiff, recovering only nominal damages, cannot have his full costs, or treble costs, without a certificate under the former act.

After the taxation the judge has no power to grant such certificate.

Rule to show cause why plaintiff in an action for infringement should not have treble costs.

Whately moved for a rule calling upon the defendant to show cause why the Master should not tax the plaintiff his treble costs, pursuant to the 5 and 6 Will. IV., c. 83, s. 3. This was an action on the case for the infringement of a patent, and the affidavit stated that a prior action had been tried between the same parties, in which the plaintiff obtained a verdict, and the judge certified under the above statute that the validity of the patent came in question before him. This certificate was given in evidence for the

plaintiff on the trial of the present action, which was tried before Lord Abinger, July 13, 1840, when the plaintiff again obtained a verdict for nominal damages. Ten days before the trial the 3 and 4 Vict., c. 24, came into operation ; but no application was made to the Lord Chief Baron at the trial to certify under that statute that the action was brought to try a right. The Master refused to tax the plaintiff treble costs under the 5 and 6 Will. IV., c. 83, s. 3, on the ground that the case fell within the provisions of the 3 and 4 Vict., c. 24, s. 2, providing that costs shall not be recoverable unless upon judge's certificate. *Whately* now contended that the latter act could not have been intended to affect the right to treble costs under the 5 and 6 Will. IV., c. 83, and further, that it did not apply to cases where it appeared by the pleadings in the cause that a *bona fide* right came in question. At all events, he urged that the Lord Chief Baron might now grant a certificate under the 3 and 4 Will. IV., c. 24. In *Shuttleworth v. Cocker* (3 Dowl. Pr. Cas. 76) the Court of Common Pleas held that a judge might alter his certificate under that act after the trial.

PARKE, B. If we entertained any doubt on this matter, we should think it right to grant a rule to show cause ; but we do not. This is certainly an unfortunate case ; but it is clear that it falls within the act of 3 and 4 Vict., c. 24, which applies to "any action of trespass on the case." Then it is said the Lord Chief Baron has still the power of certifying ; but that is not so ; the statute expressly directs that the plaintiff shall not recover costs where the damages are under 40s., unless the judge "shall immediately afterward certify" that the action was brought to try a right, etc. It may even be a question whether the judge could grant the certificate after another cause had been called on.

ALDERSON, B., GURNEY, B., and ROLFE, B., concurred.
Rule refused.

NEILSON v. FOTHERGILL.

Chancery, Jan. 21, 1841.

(1 Web. P. C. 287.)

*Account by Defendant charged with Infringement.
Payment into Court.*

If a manufacturer can successfully resist the patent right of the party claiming rent for its use, he may do so in answer to an action for the rent.

Defendant sued for infringement, ordered to keep account and to pay into court license money accrued pending action at law.

Appeal from order granting injunction.

This case differed from Neilson *v.* Thompson (*ante*, p. 136), and the bill contained the following additional statements : That the plaintiffs having called upon the defendants for an account of the iron smelted by the use of the invention, in order to ascertain the sum due, the defendants rendered an account in writing of all the iron smelted by the defendants up to August 2, 1839 (from some time in 1837), and duly paid one shilling per ton on all the iron which it appeared that up to that period they had smelted ; that plaintiffs had applied to the defendants for an account of the iron smelted since August 2, 1839, and for like payments, but defendants have refused such application.

It appeared that the draft of a license was sent to the Aberdare Company, which the defendants represented, containing, among others, a clause for revoking the license on the non-payment of the rent, and that this license was kept ; that the payments made were in conformity with it, and that plaintiffs, after August, 1839, revoked the license.

Wigram, Richards and Roupell moved to discharge the order of the Vice-Chancellor.

The only unlawful act was the refusal to pay, and a court of law affords the proper remedy for refusing to pay under an agreement. If the contract is repudiated, and the defendants are to be dealt with as strangers, the objection to the validity of the patent must then be considered. [Lord

COTTHAM, L. C. The only question is whether anything which can take place now can relieve you from the payment of the year's rent. You are liable to pay that whether the patent is good or not. I am not now ordering you to pay the rent; I have no jurisdiction to do that, but as I am called upon to interfere by injunction, I give you that relief upon such terms as appear to me to be equitable. You have, according to the rule laid down by Lord Eldon, put yourselves in the situation of invading a patent right—the right at least which has been used. I think that ought to be protected by an injunction; then the question is, upon what terms ought that injunction to be granted, if I find that you owe a year's rent, as to which you can have no defence, because it is not due by virtue of the patent right, but by virtue of the contract.] The right to an injunction is displaced by showing a contract to use the invention. The defendants have a right to dispute their liability to pay the money, notwithstanding the license. If the consideration totally fails by the patent being invalid, our having made an agreement to pay on the supposition of the patent being valid does not prevent us from raising the question. A person taking a license to use a patent, if it turns out that there is no patent in law, may at law dispute his liability to pay. He is not, as in the case of landlord and tenant, prevented from disputing the title. [Lord COTTENHAM, L. C. If it were quite clear that in whatever way the right is determined that year's rent would be payable, I should have felt no difficulty.]

Bruce, Jacob and Campbell, in support of the order of the Vice-Chancellor.

The defendants, after notice of revocation of the license, were wrong-doers; they were previously under a contract, and are by their own acts estopped from denying the validity of the patent.

The authority of *Bowman v. Taylor* (2 *ante*, p. 60) is a settled principle of law, and proceeds on the same footing as that of landlord and tenant, until you show that there has been some such impropriety of conduct or fraud as to prevent the consequence resulting. The case here is a case

of equitable estoppel, of a party having had a thing demised to him attempting to dispute his landlord's title, which is against all principle. In the present case the license has not been actually executed, but the licenses have all been granted in one form, and a draft of the proposed license was sent to the parties and never returned ; but having paid money on the footing of it, they are exactly as much bound by it in a court of equity as if they had executed it, as in the common case of a demise between landlord and tenant. The Aberdare Company have been let into possession, they have been allowed to use it, to set up machinery, to avail themselves of the profits on the faith of the contract they have continued uninterruptedly without cessation. There has been no eviction as if another patentee or alleged patentee claimed the payment, or as if the patentees had omitted to perform their duty in securing them the enjoyment of the patent. They have been let into possession, and by the use of it have made the contract as solemn in equity as if it were by deed. It is a part of the terms of the contract, as evidenced by the draft of the license, that if they did not pay it should be revoked. Thus in the case of a tenant from year to year, the landlord cannot evict him as long as he sustains the character of tenant without giving six months' notice. But suppose the tenant says, You are not my landlord, and sets him at defiance. Upon a repudiation of the landlord's title the landlord has a right to bring ejectment because his title is repudiated ; accordingly, this payment being withheld, and the right of it disputed, the payment being made a ground of continuing the license, we are restored to those rights which we had originally, and which these parties have distinctly occupied.

Lord COTTERHAM, L. C. The present case is deprived of those circumstances upon which I acted in *Neilson v. Thompson*—namely, the party who claims to be patentee permitting them to incur expense in the expectation of being permitted to use the furnaces upon the payment of the rent, which is all the plaintiff requires. But here all that is accounted for, because that was done under a contract, and for two years at least the party has had the ben-

efit of the works which he has so erected, and the patentee has kept his contract with the defendants ; he has not interposed and endeavored to deprive them of the benefit of their expenditure. It is the act of the manufacturer which has put an end to this connection ; he has therefore exposed himself to any degree of injury that may arise from the expenditure upon these works, and it appears that there is no answer to the claim to this rent from August, 1839, to August, 1840. I shall have to consider, if your client declines to escape from the injunction upon the terms I propose to him, whether the injunction should not go in a case which is deprived of those equitable circumstances which induced me to dissolve it in the others. [*Wigram.* Your lordship will give me the benefit of the supposition that, at law, I have a defence if the patent is good for nothing.] If you can show me that there is a real question to try, the money must be paid into court instead of being paid to the parties ; but at all events, I do not see how for that year, from August, 1839, to August, 1840, when you went on under the contract without giving notice to determine, you can escape paying it, either into court to abide the event of the trial of the question at law, or paying it to the party if there is no question to try.

Wigram. Your lordship said you should consider whether, since August, 1840, we were to be considered as holding adversely, and, therefore, whether liable or not to pay for what was gone by ; we were at all events wrong-doers. And then you put me to show whether I could not in law defend myself for what was said to be due in August, 1840. The principle which I have always understood to govern cases of this sort is this, that, excluding the law of estoppel, if you go into a court of law, and can show a total failure of consideration for the contract, there you may always defend yourself ; if, on the other hand, you cannot make out a case of total failure of consideration, you are liable upon your contract, and you may or may not have your cross-action. This is the general principle in these cases, subject to the question whether that which has been done may or may not amount to an estoppel. The whole

question in the case of *Bowman v. Taylor*, relied upon for the plaintiff, was whether or not there could be an estoppel by recital, and it was held that there could. In *Hayne v. Maltby* (1 *ante*, p. 53) the question was whether there was any estoppel, there being no recital of the plaintiff's title, but only an agreement and a covenant to pay, and the court held that there was not. In that case Ashurst, J., said the plaintiffs use this patent as a fraud on all mankind, and they state it to be an invention of the patentee, when in truth it was no invention of his. The only right conferred on the defendant by the agreement was that of using this machine, which was no more than that which he in common with every other subject has, without any grant from the plaintiff. That is exactly our case. We say that all mankind have a right to use it, but that some people have taken licenses, supposing it to be the plaintiff's invention. On the money then being paid into court, the injunction should be dissolved.

LORD COTTHAM, L. C. The case of *Hayne v. Maltby* appears to me to come to this—that, although a party has dealt with the patentee and has carried on business, yet that he may stop, and then the party who claims to be patentee cannot recover without giving the other party the opportunity of disputing his right, and that if the defendant successfully dispute his right, notwithstanding he has been dealing under a contract, it is competent to the defendant so to do. That is exactly coming to the point which I put, whether, at law, the party was estopped from disputing the patentee's right, after having once dealt with him as the proprietor of that right; and it appears, from the authority of that case and from the other cases, that from the time of the last payment, if the manufacturer can successfully resist the patent right of the party claiming the rent, he may do so in answer to an action for the rent for the use of the patent during that year. That being so, I think, upon the money being paid into court—that is to say, upon the amount of the rent for that year being paid into court (if required), and the same undertaking being

given to account for the subsequent period, the same order ought to be made in this case as in the others. There must be an undertaking to deal with the amount of that in the same way as before. The great difficulty in this case, which, however, is surmounted in the undertaking, is that the said suit does not go to that year's rent.

Order accordingly.

The same order was made in Neilson *v.* Harford and Neilson *v.* Homfray, the circumstances being substantially the same.

NEILSON *v.* THOMPSON.

Chancery, Jan. 21, 1841.

(1 Web. P. C. 278.)

Effect of Delay in Applying for Injunction. Account.

An injunction should not be granted where it would cause irreparable injury to defendant.

The public are entitled to know for what it is that the patentee claims the invention, that they may be saved inconvenience upon the subject ; therefore, the specification must tell the public for what it is that he claims protection.

Where plaintiff applied for an injunction against infringement, only after several years' knowledge of the facts, and irreparable damage to defendants would ensue if it were granted, *held*, that an account merely should be ordered to be kept.

Appeal to discharge injunction.

The proceedings below are reported at p. 136, where the patents in question appear. Several additional affidavits were filed on both sides. On the part of the defendants, it was stated that the apparatus made according to Neilson's directions did not succeed ; that various experiments were made, and all the attempts before the syphon or arch pipes were not only unsuccessful, but injurious ; that a person named Condie was the inventor of the present apparatus now used so successfully ; that the invention of Neilson is

substantially the same as the prior one of Botfield, both in principle and apparatus, and both totally useless ; that the apparatus of pipes in use is altogether different from anything described by Neilson, both in principle and construction ; that many parts of Neilson's specification are false, and calculated to mislead ; that defendants applied the hot air to one furnace in November, 1838, and to another in November, 1839, and that the cost for each furnace of the requisite apparatus is £750.

On the part of the plaintiffs were affidavits by Neilson stating his belief that he was the true and first inventor of that for which the letters patent were granted, and which was described and claimed in the specification, and that air artificially heated while in current or blast had not been openly or publicly used prior to the date of the patent ; that the invention was highly beneficial, and used by many iron-masters under licenses ; that no compromise ever took place on his part with any party except on the terms of paying one shilling per ton.

It was stated in other affidavits that thirteen parties in Scotland and fifty-eight in England had taken licenses ; that the inventions of Botfield and Neilson were totally and essentially distinct ; the former being mechanical, or a method of creating a blast, by which the air was necessarily rendered unfit to support combustion—the latter being chemical.

Wigram, Richards and Roupell moved to discharge the order of the Vice-Chancellor.

The utmost that the plaintiffs can ask under the circumstances of this case, on the ground of the length of time which the patent has been in existence, is for an account, and this the defendants have always been ready to keep. The patentee does not in this case make his profit by selling the article, but by granting licenses to iron-masters to use his patent on paying one shilling per ton on all the iron made. The defendants, until the validity of the patent was tried, ought not to be compelled either to pay the one shilling per ton or to take a license, experience having shown that those persons who were so incautious as to pay the one

shilling per ton or to take a license were very much hampered in case of the patent being disputed. The action at law will be tried as soon as possible, but the defendants ought not in the mean time to have any other terms imposed than keeping the account and undertaking to pay one shilling per ton in the event of the title to the patent being established, because the apparatus described by the specification did not come into use at all, but an apparatus essentially different came into use some years afterward. If an injunction be granted in the mean time, and the patentee fail in establishing his title, the defendants will lose all the expense which they have been at in preparing the furnaces, whereas, if he succeed, the plaintiffs will be paid eventually.

It appears from the bill and the affidavits that there was acquiescence for more than a year before the bill was filed; no agreement is stated, but simply acquiescence, in expectation that the defendants would pay on finding it answer. Supposing the patent good, there was no ground for a court of equity granting an injunction as the case stood upon the bill—namely, upon the expectation that a license would be taken. The case of a person making a patent article and selling that article is totally different from the present case, in which the profits arise entirely from the granting of licenses. In the former case irreparable mischief may be done, the party losing the benefit of the sale, and being liable to be prejudiced in his credit from the articles being of an inferior quality, so that the court may not be in a position to do complete justice to the patentee; but in the present case no injury can be done by requiring the patentee to establish his patent, an account being kept in the mean time, there being no doubt as to the abilities of the parties to pay. An expense of more than £5,000 has been incurred by the plaintiffs' acquiescence in the erection of the works, and in cases of acquiescence the court will say keep an account, and the parties will be interested in trying the question at law with dispatch.

The extraordinary relief of an injunction will not be granted to a patentee unless he states distinctly what he

claims, whether for a principle or a method ; if the specification be obscure in this respect, the court will not interfere until the question has been decided at law. The specification mentions two things, the use of hot air for smelting and the apparatus ; in respect of both the patent is bad. The use of hot air in furnaces was known to others, and Botfield's patent was taken out for the express purpose of applying hot air ; so that the application of heated air to a furnace was certainly known at the time of Neilson's patent, the only difference being that Neilson calls that a receptacle which Botfield calls an oven. But supposing Neilson's patent to be for an apparatus distinct from that described by Botfield, then the whole evidence shows the apparatus to have been a complete failure and perfectly useless. In fact, the apparatus used by defendants and other iron-masters is something totally separate and distinct. Under these circumstances, the length of enjoyment will not aid the plaintiff, since he never was a patentee within the sense and meaning which he ought to be as a plaintiff in this court. His right to possession is shaken, and whatever the number of licenses granted makes no difference. These may have been taken in ignorance of there being any other patent in existence.

The order of the Vice-Chancellor is incorrect, on the ground of the time which the defendants are alleged to have used the invention. It is quite clear that if a party who represents himself to be a patentee permits an individual to go on for a certain time using that which he alleges to be his patent without coming to the court, the court will not give the patentee an injunction at once, but will direct him to enforce his right at law. The parties in this case are found with notice in 1839—the bill is not filed till December, 1840 ; they have not, therefore, used that due diligence which the court requires, or which entitles them to ask for an injunction, especially when no benefit can accrue to the plaintiff, and irreparable detriment must be occasioned to the defendants.

Bruce, Jacob and Campbell, for the plaintiffs, in support of the order of the Vice Chancellor.

The questions raised are the validity of the patent ; that if valid, it has not been infringed ; that if valid and infringed, the plaintiffs have so conducted themselves as not to be entitled to an injunction. The Vice-Chancellor was of opinion that there was an infringement, that the age of the patent and the enjoyment there had been under it precluded him, according to the course of the court, from acting on any notion that it was invalid ; nor did he intimate any opinion respecting the validity, his expression being that it was within the principle laid down by Lord Eldon in *Harmar v. Playne* (1 *ante*, p. 166).

The enjoyment which there has been under the patent and the circumstances under which the present defendants have used it are, to a certain extent, combined together ; so that the patent must be taken to be good for the present purpose, and nothing that has occurred has been of such a nature as to preclude the plaintiffs from the right to obtain an injunction. The defendant's affidavit is perfectly silent as to the user of the patent at the other works with which he is connected. There have been fifty-eight licenses taken in England, and a great number in Scotland ; several actions and suits by the patentee against infringers have been conducted to a successful issue, and several injunctions have been submitted to ; so that there has been a distinct user against the public. The contractors in the case of a patent are the public and the inventor, and the use of it against the public is evidence against every member of that public of the patent having been submitted to as valid.

The case of *Harmar v. Playne*, in which Lord Eldon recognized the previous case of *Boulton v. Bull* (1 *ante*, p. 97), and granted an injunction on the ground of long possession, notwithstanding the very great doubt which he entertained of the validity of the specification, very accurately represents the law and practice as it has been acted on from that time to the present. It is held that the patentee, through the medium of the Crown, purchases publication to the world by means of an enrolled specification, the result of the patentee's ingenuity and diligence, and as a consideration for that communication his invention is protected

during a certain time. It is not for the general good or for the encouragement of ingenuity and diligence to displace or embarrass such rights on light and trivial grounds. When, therefore, a party has been in possession of such a right, not displaced by scire facias, acquiesced in by the public during a considerable period of time, the court says it will give credit to the validity of the patent until its invalidity is regularly established by a proper proceeding in a court of law, and it shall be protected in the mean time. The parties are perfectly ready to bring an action, and this is part of the order.

The court ought not now to entertain the question of validity ; the unsuccessful experiments stated in the affidavit, and relied on by the opposite side, were made during the interval of six months allowed for specifying. It is quite immaterial whether these were successful or not ; but has the invention been successful, supposing what the defendants are doing to be an infringement ?

It is said Botfield had a patent previous to Neilson for the application of hot air to a blast furnace ; no one states having heard of his invention being applied ; and the two inventions, as disclosed by the specifications, are quite distinct—Botfield's invention being purely mechanical to obtain a draught, and Neilson's purely chemical to obtain a blast of improved quality. It is clear that no one at the time doubted the novelty of the invention, but that all doubted its utility ; there being a settled conviction that the furnaces did better in winter than in summer, because the air was colder. The question of utility is placed beyond all doubt, and the acquiescence of the trade to the extent which has been proved is evidence of the universal acknowledgment of the novelty of the invention and of the sufficiency of the specification by men at once most interested and most competent to know the one and to show the impropriety or insufficiency of the other. [Lord COTTENHAM, L. C. There is this question whether, supposing the advantage of hot air instead of cold to be a novelty, it is claimed. The public are entitled to know for what it is that the patentee claims the invention, that they may be

saved inconvenience upon the subject ; therefore the specification must tell the public for what it is that he claims protection. If it be for a principle, then if that be good it will apply to every mode in which that principle can be carried into operation. If for a machine for a particular mode of carrying into effect an old principle, that does not go beyond the machine. The question is whether the specification does sufficiently inform the public in respect of what it is he claims the privilege.]

As to the infringement. The defendants use a number of air-tight vessels ; it is not suggested that there is any other mode of communicating heated air to a furnace than by enclosing it in an air-tight vessel or vessels, and heating the exterior of that vessel or those vessels so as to heat the air, and then transmitting the air direct, without contact with the exterior air, from the vessel or vessels into the furnace. It cannot then be said that this specification is clearly wrong. There was great doubt in Lord Eldon's mind in the case of *Harmar v. Playne*, but he saw that men of science, men most interested to contest the patent, and most competent to understand whether it could be contested or not, had been submitting to it, and that they had thus given evidence of the sufficiency of the specification, part of the conditions of the validity of the patent, by their conduct ; and that it was unfit, therefore, upon any difficulty which might present itself to his mind, to hesitate giving effect to the protection which the legislature designed for ingenious men, and unfit to refine away that protection, which can only have the effect of discouraging them from communicating the result of their skill and their diligence to the public.

It is not necessary in a patent for an improved application or an improvement for the patentee to describe and elucidate in what particular respect the improvement consists, to describe why it is better. He describes a plan by which he produces a certain effect, which he says is an improvement, and which in this case is a plan for heating the air while in transit between the bellows and the furnace, and for heating it by passing it through some heated vessel.

The shape of the vessel is important only with regard to the locality and the economy of fuel. With a round vessel a much larger quantity of fuel will be required to produce a given quantity of heat than with a flat vessel or a pipe. The patentee has a right to claim for heating in transit without reference to the shape or form ; any shape or form will answer the purpose, though some shapes and forms will be cheaper and more convenient for some purposes to which the invention may be applied than others.

Suppose the inventor of the steam-engine to have taken out a general patent. If his description had been general enough, it might have included locomotive as well as stationary engines, and those used for the purposes of navigation ; but if he had made it an essential part of his description that it should be stationary, or fixed to a house, he would be excluded from some sorts of engines from which he would not have been excluded had he described it as a machine to be worked by the condensation of steam and steam power. And yet, concurrently with that steam-engine patent, Boulton and Watt might have had their patent ; and another person using the patent engine might perceive that a particular valve would be a great improvement in the patent engine, and might have a patent for that valve.

This patent being for an organized principle, it has this advantage, that the patentee is entitled to claim any mode in which that principle shall be applied. Where the principle is of a scientific or a chemical nature, it matters nothing what may be the peculiar arrangement of the different apparatus, because the principle will necessarily be found, whatever may be the form of apparatus or whatever may be the form of vessel. One apparatus may produce a greater heat than another, but still the principle of the patent is to be found, and the benefit which is to be derived from the peculiar form of apparatus is still a benefit due to the patentee, who has discovered, not any particular mode of applying the hot air, but the applicability generally of hot air to furnaces.

It appears from the evidence on the other side that one

of the first modes in which Mr. Neilson applied his invention consisted of a cylinder, from 8 to 10 feet long and $2\frac{1}{4}$ feet in diameter, and this was used at the Calder Works. This is nothing more in effect than a large pipe, and if instead of one pipe two should be used, there would still be the same principle necessarily involved. The pipes now used are not independent pipes, but a continued series.

The licenses are all in one form, and it appears that the plaintiff would not have called for payment before the expiration of a year, and Mr. Thompson was perfectly cognizant of this, having, as a partner in several other works, acquiesced in this course, and paid rent for the use of the plaintiff's invention. [Lord COTTENHAM, L. C. Suppose that your whole case is true, that you were aware they had erected this machine which you said was not to be used without a license in the year 1839, and some communication took place, what we do not know, but you know it, and you were willing they should use it on paying a rent ; I do not see how that entitles you to an injunction to prevent them from using it. All you could insist on is that they should pay the rent. You could not, after having permitted them to erect their machinery, at an expense of £750 each machine, have said, Now you have erected this with my knowledge ; I will prevent you from using the boiler which you have so erected, without any understanding at all. This court might have given you the aid of an injunction to secure the rent, but you never could have come to the court and said, You shall not use it at all, and that is the injunction granted.] To refuse to entertain the suit would be to deprive the plaintiff of the benefit of his possession of ten years' duration in the face of the world, with the acquiescence of the trade, and after several successful actions. In *Boulton v. Bull* (1 *ante*, p. 97) Lord Rosslyn refused to dissolve an injunction, although the Court of Common Pleas had been equally divided upon the validity of the patent ; there had been long possession in that case, but the right was at the time very doubtful, and Lord Rosslyn proceeded on the ground that he would not disturb the possession. In *Harmar v. Playne* (1 *ante*, p. 166) Lord

Eldon acted on the same principle, and said that when the public had permitted enjoyment under a patent for a reasonably long time, the court would give credit to the patent until the legal question could be tried, and he therefore granted the injunction, although he expressed great doubt as to the validity of the patent.

Lord COTTERHAM, L. C. If you are willing to deal with the shilling a ton as the court may direct, and to do that upon grounds quite unconnected with the merits of the case, I think I ought to deal with this question of the injunction, because this is not like the case referred to where the party had been in possession of a patent, and somebody else had done that which was an infringement, provided the patent be good, because here the plaintiff's own statement is, without raising any doubt as to how far that may be correct, assuming the whole statement to be true, that in the year 1839 he was aware that these defendants were at some considerable expense in preparing the apparatus for the purpose of using this hot blast, and he never interfered to stop them, but permitted them to go on, as he says, under the expectation that they would pay him a shilling a ton after a certain time. That is the position in which he has by his own act placed the defendants. Nothing that took place could preclude the defendants from the right of disputing the plaintiff's right as a patentee, but they have, at very considerable expense, erected this machinery, and from that time to the present have been using it, the plaintiff being aware of it at least from some time in 1839 (the precise day is not stated), and stood by and permitted them to do this. If he is entitled as patentee, it would be extremely hard for the court to do anything to prevent his receiving that which he is entitled to receive, and in expectation of which he permitted the defendants to go on with their works. But, on the other hand, it would be extremely hard indeed to tell the defendants that they shall not use the works which, with the plaintiff's knowledge, they have prepared at a very considerable expense; and as to telling them they may go on with the cold blast instead

of the hot blast, I am told that the difference between the use of the one and of the other is an expense of nearly double, even if it were possible ; at all events they may sustain that loss in the interval until the right is tried. It seems to me that stopping the works by injunction, under these circumstances, is just inverting the purpose for which an injunction is used. An injunction is used for the purpose of preventing mischief ; this would be using the injunction for the purpose of creating mischief, because the plaintiff cannot possibly be injured. All that he asks, all that he demands, all that he ever expects from these defendants, is one shilling per ton. He has not a right to say to them, You shall not use this apparatus ; he cannot do so after the course of conduct he has adopted ; he may, no doubt, say with success, if he is right, You shall pay me that rent which the others pay, and in the expectation of which I permitted you to erect this machinery. Therefore, in no possible way can the plaintiff be prejudiced ; but the prejudice to the defendants must be very great indeed if they are for a short period prevented from using at their furnaces that apparatus which, with the consent of the plaintiff, they have erected. The object therefore is, pending the question, which I do not mean to prejudice one way or the other by anything I now say, to preserve to the parties the opportunity of trying the question, with the least possible injury to the one party or the other ; and I think the injunction would be extremely prejudicial to the defendants, and do no possible good to the plaintiff, for the purpose for which it may be used. It may by operating as a pressure upon the defendants produce a benefit, but that is not the object of the court ; that object is to preserve to each party the benefit he is entitled to until the question of right is tried, and that may be entirely secured by the defendants undertaking to keep an account, not only for the time to come, but from the time when the connection first commenced, and undertaking to deal with that account in such a way as the court may direct ; and if the plaintiff is entitled, the court will have an opportunity of putting the plaintiff precisely in the situation in which he would have

stood if this question had not arisen. If it shall turn out that the patent is not valid, the court will deal with it accordingly ; and that will, I think, most effectually prevent all prejudice.

Order accordingly.

WALTON v. POTTER.

Common Pleas, N. P., Hil. V., 1841.

(1 Web. P. C. 585.)

Infringement. First Inventor. Questions for the Jury.

Infringement is a question for the jury.

A specious variation in form or ingenious alteration in the mode of adaptation constitutes an infringement.

Patents may be taken out for the same object by several patentees, provided the subsequent inventions rest upon the skill of the inventor, and have been made without reference to or are not borrowed from the former.

Though the matter may not have been used, the party is not entitled to his patent unless he is the first and true inventor ; therefore, if the subject-matter of the patent has been discovered, has been published in a dictionary, for example, though it has not been reduced into practice, if a man merely adopts it, the merit is so small that his patent for it would be worth nothing.

The sufficiency of the specification in matters of description is for the jury to determine.

A patent for an invention of improvements in cards for carding wool, cotton, silk and other fibrous substances, and for raising the pile of woollen and other cloths by the application and adaptation of caoutchouc or india-rubber, as a substitute for the fillets or sheets of leather, *hold* a new invention.

Case for infringement.

The patent was granted to James Walton, March 27, 1834, for "improvements in cards for carding wool, cotton, silk and other fibrous substances." It was numbered 6,584.

The specification was as follows :

"I, James Walton, do hereby declare the nature of my invention to consist in the application and adaptation of the material known by the name of caoutchouc or india-rubber as a substitute for the fillets or sheets of leather which are commonly used in the construction of ordinary cards, and



A.D. 1834. MARCH 27. N^o 6584.

WALTON'S SPECIFICATION.

(2nd Edition)

(1 SHEET)

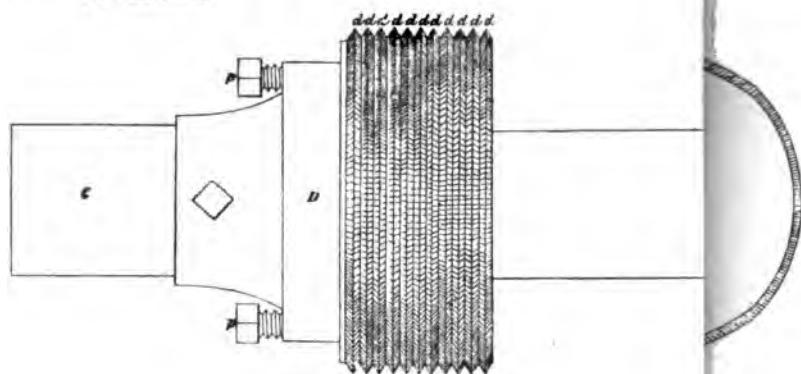


FIG. 8.

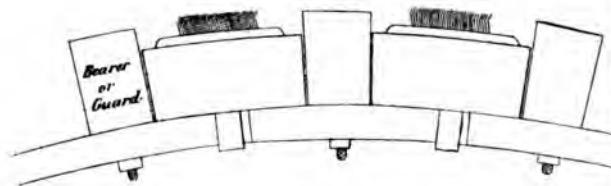
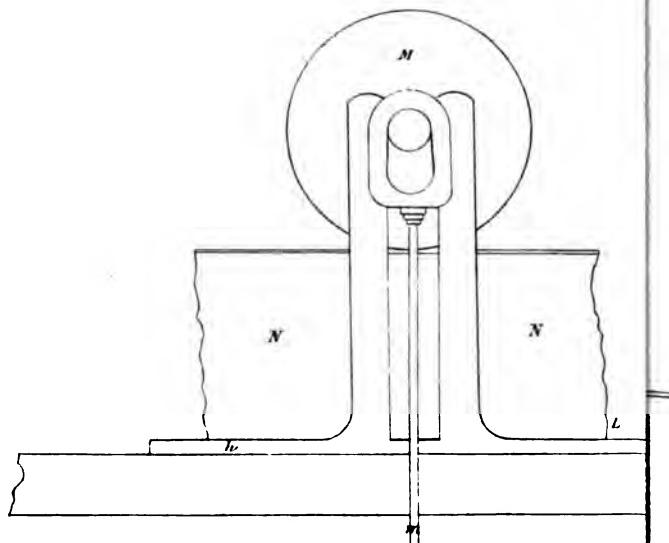


FIG. 4.



A.D. 1834 N° 6584.

Cards for Carding Fibrous Substances.

WALTON'S SPECIFICATION.

NOW KNOW YE that in compliance with the said proviso I the said James Walton do hereby declare the nature of my said Invention to consist in the application and adaptation of the material known by the name of caoutchouc or india rubber as a substitute for the fillets or sheets of leather which are commonly used in the construction of ordinary cards and thus giving a superior elasticity and durability to such cards. And in further compliance with the said proviso I the said James Walton do hereby describe the manner in which my said Invention is to be performed by the following statement thereof reference being had to the Drawing annexed and to the figures and letters marked thereon that is to say

DESCRIPTION OF THE DRAWING.

Figure 2 represents an elevation of a card constructed with an india rubber or caoutchouc foundation or fillet as shewn at *a a* in which the wire dents or teeth are inserted and the regularity of distance and uniformity of the dents or teeth of the cards are found to be better preserved by a piece of linen commonly called brown Holland or other like cloth well glazed and cemented on to the back of the caoutchouc or india rubber as shewn by a red line at *b b*. The cloth *b b* when fastened to the caoutchouc continues to keep the dents or teeth more firmly in their places when in

Walton's Improvements in Cards for Carding Fibrous Substances.

use and the foundation or fillet being thereby made much stiffer the action of the dents or teeth is less uncertain in their elastic movement. The cloth so cemented to the india rubber or caoutchouc is to be affixed to the cylinder or board or the ordinary carding engine by nails but if it is to be affixed by cementing then it is desirable to remove the cloth which in this case should only be slightly attached to the india rubber and this will be found the best mode of applying the cards thereon. When the cards are constructed by hand it is essential that the cloth *b b* should be first pricked by an engine (as is the practice when leather is used) to regulate the distance and required uniformity of the dents or teeth and in cases where cloth is introduced between two layers of caoutchouc or india rubber as represented by the red line at Figure 3. The india rubber or caoutchouc is pricked or pierced in a similar manner to enable the card maker to force the dents or teeth through it without bending or injuring their form or shape but the pricking of the holes may be effected by the patent machinery of Mr. Dyer of Manchester now in use for that purpose. It may be as well here to observe that when I mention cement in this Specification I always allude to what is now generally called india-rubber cement and which as it has now become an article of general sale and may be bought by that name I do not think it necessary further to describe the same but as the machines for cutting india rubber are not generally known and as I prefer caoutchouc or india rubber in the state it is imported for my purpose I will now describe the means which I use for cutting the caoutchouc or india rubber into layers from the solid blocks as imported and which I recommend in preference to what is termed manufactured india rubber or india rubber first dissolved by some known solvent and then cast in moulds to form blocks the former being most suitable for the purpose. I first cut the block lengthwise into suitable sizes according to the nature of the cards to be manufactured and then place the flat or regular surface of the block on a

Walton's Improvements in Cards for Carding Fibrous Substances.

metallic surface which moves freely between two guides the exact thickness of the sheet of caoutchouc or india rubber which it is designed to cut off—And it will be evident that by varying the thickness of the metallic surface the proper thickness of caoutchouc will be cut off. A sharp knife kept occasionally wet with water and supported on guides is then pressed with a sawing action against the india rubber or caoutchouc by the operator at the same time that he forces the india rubber or caoutchouc forwards between the guides by turning the roller *n* and thus severs or cuts off a piece of the exact thickness required. The pieces thus cut off may be joined together to form fillets or sheets according to the nature of the card intended to be made and when the teeth or dents are set therein may be nailed to the board in the usual manner or cemented on it. This apparatus is shewn at Figure 4 which represents a side view and Figure 5 an end view of the same. In these Figures L represents the knife and *h h* the rests on which it is supported N N is the block of caoutchouc or india rubber and *n* one of the layers which is cut off seen in Figure 5. M represents the roller pressed upon the caoutchouc or india rubber N N by weights attached to the small rods *m m* on each side. In cutting the layers of caoutchouc or india rubber I have found the operation greatly facilitated by using water and keeping the knife constantly wet.

But I would here observe that I lay no claim to the cutting apparatus herein-before described as I have only shewn it as the best method I am at present aware of to effect the purpose.

The apparatus for grinding or pointing the wires forming the cards herein-before described as represented in Figure 1 which is an elevation of a portion of a shaft having a series of cutters or files placed thereon as will be described hereafter this shaft must be fixed in suitable bearings and rotary motion be communicated thereto from any first mover. C C is the shaft of any required length. *d d d d d d d d d d* are a number of circular steel rings or discs having bevelled

Walton's Improvements in Cards for Carding Fibrous Substances.

edges on each face with grooves or notches cut in them similar to files for the purpose of grinding or pointing the teeth or dents of the cards when placed in contact therewith during the revolution of the shaft. A few only of these cutters or files are shewn in the Drawing as their number will depend upon the length of card intended to be pointed or sharpened but when in use the whole shaft is supposed to be strung with them. D D are two flanges capable of being moved freely on the shaft and provided with set screws for the purpose of fixing the circular files or cutters firmly together. p p p p are screws tapped into the flanges D D for the purpose of setting the circular cutters or files to any degrees of obliquity that may be required as will be hereafter explained. This apparatus is used in every respect similarly to the circular emery strickles or grinding cylinders which are in ordinary use but instead of grinding the wire to a flat face or chisel edge as is the case with the ordinary emery grinder it grinds the wire to an angular form which is found to make a much better point to the dents or teeth. I also find it useful to put these cutters a little out of truth or with a slight obliquity which I effect by means of the set screws p p in the flanges D D before mentioned and by turning the hole or centre of each cutter somewhat larger than the diameter of the shaft so that the screw on one side of the shaft may be pressed against the face of the cutter or file or cause it to assume the oblique position shewn near the right-hand flange at Figure 1 by setting the circular cutters in this position the points of the wire which enter into the angular spaces between the respective cutters may be ground more or less obtuse as the nature of the work to which they may be applied may require thus supposing the cutters to be set true the points of the wire would correspond with the angular space between each cutter but if the cutters be placed in an oblique position and the point of the wire not entering to the bottom of the grooves the wire will be impinged on alternately by the alternate cutters and thereby rendered more or less obtuse

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according to the obliquity and depth at which the cutters are set in grinding or pointing cards placed on a cylinder. This arrangement of steel cutters or files might extend the whole width of the card intended to be ground or pointed ; but I have sometimes effected the grinding of raising cylinders by removing the cutters to different parts of the surface of the wires as they required grinding. In cards or implements used as a substitute for teasels and for some descriptions of carding I would further remark that I find it of importance to cut the points of the dents or teeth of the card in an oblique or diagonal direction as shewn at Figure 6 previous to inserting them in the caoutchouc or india rubber which not only renders the dents or teeth more easily forced through the caoutchouc or india rubber but materially facilitates the subsequent grinding up by the grinding apparatus herein-before described and a very little oil used on the dents or teeth when they are inserted into the caoutchouc or india rubber renders this operation easy and more readily performed.

Figure 7 represents an end view of the shaft carrying the cutters in section shewing the hole in the cutter larger than the shaft on which it turns so as to admit of the required angle being given to it.

Figure 8 shows an edge view of part of a cylinder for raising the pile on cloths having bearers or guards introduced between the cards to prevent them being pressed on too severely. The advantages presented by cards of this construction consists in the superior elasticity of the caoutchouc or india rubber allowing the dents or teeth to be pressed down without material injury to the card at the same time the teeth or dents are sufficiently firm to perform the carding or raising operation and even though the dents or teeth should be pressed down to the surface of the caoutchouc or india rubber of the card they would not be bent but immediately recover their former position by the elasticity of that substance. Again in substituting cards of this construction in the place of teasels or ordinary wire cards

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for the purpose of raising the pile of woollen and other cloths I am enabled to work them wet without any material variation of the elasticity of the caoutchouc or india rubber which remains more uniform in its action and effects the operation of raising the pile of woollen and other cloths more regularly and without that variation experienced in the teasel in its transition from a dry state to a state of moisture and by varying the thickness of the caoutchouc or india rubber I am enabled to gain a delicacy of action in the card equal to raise a nap or plush on fine silk fabrics as well as in the ordinary woollen cloths finished by this process and in all cases when the cards are worn out the caoutchouc or india rubber is worth nearer its original value than other material heretofore used for a similar purpose. The thickness of caoutchouc I usually employ is about one eighth of an inch in thickness for raising purposes but this must vary according to the length of wire of which the teeth are formed and the quantity of elasticity required. The thicker the india rubber and the shorter the wire the greater will be the stiffness.

Having described the nature of my Invention of Improvements in Cards for Carding Wool Cotton Silk and other Fibrous Substances and for Raising the Pile of Woollen and other Cloths together with the manner in which the same is to be performed and carried into effect I hereby declare that I do not claim any particular method or means of setting or placing the dents or teeth of the cards nor do I claim the means herein described for pointing the cards but have described the various parts as the means I have pursued and find to answer in effecting my improvements in cards.

And I do hereby confine my claim of Invention to the application and adaptation of caoutchouc or india rubber as the fillet or sheet or medium in which the dents or teeth are to be set together in the manufacture of cards and thereby obtaining a superior elasticity and durability to cards as above described. And such my Invention being to the best of my knowledge and belief entirely new and

Wallon's Improvements in Cards for Carding Fibrous Substances.

never before used within that part of His said Majesty's United Kingdom of Great Britain and Ireland called England His said Dominion of Wales and Town of Berwick-upon-Tweed I do hereby declare this to be my Specification of the same and that I do verily believe this my said Specification doth comply in all respects fully and without reserve or disguise with the proviso in the same herein-before in part recited Letters Patent contained. Wherefore I do hereby claim to maintain exclusive right and privilege to my said Invention.

In witness whereof I the said James Walton have hereunto set my hand and seal this Twenty-fifth day of September in the year of our Lord One thousand eight hundred and thirty-four.

JAMES (L.S.) WALTON.



thus giving a superior elasticity and durability to such cards. And I do hereby describe the manner in which my invention is to be performed by the following statement thereof, reference being had to the drawing annexed, and to the figures and letters marked thereon ; that is to say, Fig. 2 represents an elevation of a card constructed with an india-rubber or caoutchouc foundation or fillet as shown at *a a*, in which the wire dents or teeth are inserted, and the regularity of distance and uniformity of the dents or teeth of the cards are found to be better preserved by a piece of linen, commonly called brown holland, or other like cloth, well glazed and cemented on to the back of the caoutchouc or india-rubber, as shown by a red line at *b b*. The cloth *b b* when fastened to the caoutchouc continues to keep the dents or teeth more firmly in their places when in use, and the foundation or fillets being thereby made much stiffer, the action of the dents or teeth is less uncertain in their elastic movements. The cloth so cemented to the india-rubber or caoutchouc is to be affixed to the cylinder or board in the ordinary carding engine by nails, but if it is to be affixed by cementing, then it is desirable to remove the cloth, which in this case should only be slightly attached to the india-rubber ; and this will be found the best mode of applying the cards thereon. When the cards are constructed by hand, it is essential that the cloth *b b* should be first pricked by an engine (as is the practice when leather is used) to regulate the distance and required uniformity of the dents or teeth, and in cases where cloth is introduced between two layers of caoutchouc or india-rubber, as represented by the red line at Fig. 3, the india-rubber or caoutchouc is pricked or pierced in a similar manner to enable the card-maker to force the dents or teeth through it without bending or injuring their form or shape, but the pricking of the holes may be effected by the patent machinery of Mr. Dyer, of Manchester, now in use for that purpose. It may be as well here to observe that when I mention cement in this specification I always allude to what is now generally called india-rubber cement, and which has now become an article of general sale, and may be bought by that name ;

I do not think it necessary further to describe the same ; but as the machines for cutting india-rubber are not generally known, and as I prefer caoutchouc or india-rubber in the state it is imported for my purpose, I will now describe the means which I use for cutting the caoutchouc or india-rubber into layers from the solid blocks as imported, and which I recommend in preference to what is termed manufactured india-rubber, or india-rubber first dissolved by some solvent and then cast in moulds to form blocks, the former being most suitable for the purpose. I first cut the block lengthwise into suitable sizes, according to the nature of the cards to be manufactured, and then place the flat or regular surface of the block on a metallic surface, which moves freely between two guides, the exact thickness of the sheet of caoutchouc or india-rubber which it is designed to cut off, and it will be evident that by varying the thickness of the metallic surface a proper thickness of caoutchouc will be cut off ; a sharp knife kept occasionally wet with water and supported on guides is then pressed with a sawing action against the india-rubber or caoutchouc by the operator at the same time that he forces the india-rubber or caoutchouc forward between the guides by turning the roller *n*, and thus severs or cuts off a piece of the exact thickness required. The pieces thus cut off may be joined together to form fillets or sheets according to the nature of the card intended to be made, and when the teeth or dents are set therein, may be nailed to the board in the usual manner, or cemented on it. . . .

" The advantages presented by cards of this construction consist in the superior elasticity of the caoutchouc or india-rubber, allowing the dents or teeth to be pressed down without material injury to the card, at the same time the teeth or dents are sufficiently firm to perform the carding or raising operation, and even though the dents or teeth should be pressed down to the surface of the caoutchouc or india-rubber of the card, they would not be bent, but immediately recover their former position by the elasticity of that substance. Again, in substituting cards of this construction in the place of teasels or ordinary wire cards, for

the purpose of raising the pile of woollen and other cloths, I am enabled to work them wet, without any material variation of the elasticity of the caoutchouc or india-rubber, which remains more uniform in its action, and effects the operation of raising the pile of woollen and other cloths more regularly, and without that variation experienced in the teasel in its transition from a dry state to a state of moisture ; and by varying the thickness of the caoutchouc or india-rubber I am enabled to gain a delicacy of action in the card equal to raise a nap or plush on fine silk fabrics, as well as on the ordinary woollen cloths finished by this process ; and in all cases when the cards are worn out the caoutchouc or india-rubber is worth nearer its original value than other material heretofore used for a similar purpose. The thickness of caoutchouc I usually employ is about one eighth of an inch in thickness for raising purposes, but this must vary according to the length of wire of which the teeth are formed and the quantity of elasticity required ; the thicker the india-rubber and the shorter the wire the greater will be the stiffness.

“ Having described the nature of my invention of improvements in cards for carding wool, cotton, silk and other fibrous substances, and for raising the pile of woollen and other cloths, together with the manner in which the same is to be performed and carried into effect, I hereby declare that I do not claim any particular method or means of setting or placing the dents or teeth of the cards. Nor do I claim the means herein described for pointing the cards, but have described the various parts as the means I have pursued, and find to answer, in effecting my improvements in cards. And I do hereby confine my claim of invention to the application and adaptation of caoutchouc or india-rubber as the fillet or sheet, or medium in which the dents or teeth are to be set together in the manufacture of cards, and thereby obtaining a superior elasticity and durability to cards as above described.”

The following letters patent and inventions are also referred to in the legal proceedings on the above patent.

Letters patent, November 29, 1824, to Thomas Hancock,

for "a method of making or manufacturing an article which may be in many instances substituted for leather, and be applied to various other useful purposes."

Specification. "The nature of my invention consists in combining together the fabric or filaments of various matters, such as flax, hemp, cotton, wool, hair or other matters of the like flexible nature, by saturating them in connection or in contact with each other with a liquid which, when partially evaporated, becomes a flexible and adhesive substance, such fibres being previously arranged or disposed as to shape and dimensions according to the purposes to which they are afterward to be applied, so as to produce a uniform combination of the fibres and the substance, or in such a manner as that every individual fibre may be so surrounded with the said substance as that the whole of the fibres composing the mass, when united by the substance, may form a compound or article somewhat resembling leather, and which said compound, substance or article may in many cases be substituted for leather, more or less advantageously—namely, for harness, straps, belts, accoutrements, boots, shoes, flexible pipes, air-tight bags, and a variety of other things which have heretofore been made of leather; and the said substance or article may also be applied to various other useful purposes, such as parts of wearing apparel which it may be desirable to have waterproof, and which commonly are made of other substances than leather. The article may also be applied for the roofs of verandas, awnings, tent coverings, and to other similar purposes."

The specification then describes the mode of manufacturing this new article; the kind of materials to be selected according to the purposes to which it was to be applied. The liquid employed is that said to be the juice of certain trees from South America, and when inspissated closely resembling and believed to be the same as caoutchouc or india-rubber.

Letters patent March 15, 1825, to Thomas Hancock, for "a new or improved manufacture, which may in many instances be used as a substitute for leather and otherwise."

Specification. “ My said invention consists in filling, saturating and combining various fibrous substances, in their manufactured and unmanufactured state, with a composition which leaves to the fibres sufficient flexibility, and at the same time unites and consolidates them into one mass, thereby increasing their strength and durability, and producing by these means a manufacture which may be in many instances substituted for leather, and be applied to other useful purposes, such as soles for shoes and boots, hose-pipes, pails and other articles which have heretofore been made of leather, and also to other useful purposes, such as the roofs of verandas, corn and flour sacks, packing cloths and tarpaulins. The fibrous substances I employ in this manufacture are wool, cotton, hair, silk, flax, hemp, carded, combed or hackled, and combined with the same substances woven and manufactured.

“ As the same process is applicable to all the combinations, it will be necessary to describe the method I pursue in one case only, as any variation may be made in arranging the different substances at the discretion of the operator.

“ I take a piece of cotton cloth of any convenient size and strain it on a board, and spread over it with a spatula or other convenient instrument a full coating of one of the compounds to be hereinafter described. I then spread on or over the compound a layer of carded cotton somewhat similar to the article known by the name of wadding, spreading over this again another piece of cotton cloth prepared as the first. I then submit the whole to sufficient pressure between boards or plates of metal, either passing them through or between rollers or otherwise, to force the composition quite through the layer of carded cotton. I then carefully remove it from the boards or plates, and leave it to dry either in the open air or in a warm room heated to eighty or ninety degrees of temperature, and proceed to make others in the same manner. When I perceive that they are nearly or quite dry, I again submit them to the press, or if one of these strata is not sufficient to make up the thickness I require, I put two, three, four or more together, spreading the said compound on the surfaces

again, if necessary, and increasing the pressure. After they have been in the press some hours they may again be exposed to the air or return to the warm room to complete the drying, and if necessary pressed again. When I wish to have the carded cotton for either or both surfaces, I carefully separate, at the end of two or more pressings, the last layer or layers of cloth from the cotton below it soon after I take it out of the press (as it will then separate), and proceed as before described. In this manner I introduce into this manufacture hair, wool, silk, hemp and the like, or any mixture of these fibrous substances, or any or all of them mixed with chopped hemp or tow, and carded together, or I heckle or comb hemp or flax and lay the fibres parallel with each other, and combine any intermixture of these different materials with the different kinds of manufactured wool, silk, linen, cotton and the like, according to the purpose to which the article is to be applied, or as economy may dictate. For soles of shoes and boots I prefer wool, hair and cotton in about equal proportions ; for hose-pipes, pails and accoutrements, chopped hemp, tow and cotton. I prefer the woven materials to be made of wool or cotton, and these of an open, loose and coarse texture, excepting where it is intended for a finer surface ; in such cases I choose the fabric of a finer quality. If the article is required to have a smooth surface, I produce it by using polished metal plates the last time the article is pressed. I make the compound or compounds with which I unite or combine the said substances as follows : No. 1. I take two pounds of caoutchouc, dissolved in one gallon of equal parts of oil of turpentine and highly rectified coal-tar oil, six ounces of black resin, two pounds of strong glue size, and one pound of ochre, powdered pumice or whiting, and mix the whole together ; or, No. 2. One pound and a half of caoutchouc, dissolved as before stated, one pound of strong glue size ; I melt and mix the resin and size in a water or steam bath, and add the other ingredients, stirring the whole until it is mixed throughout. The solution of the caoutchouc is expedited by a water or steam bath, and the undissolved portions may be separated by straining it

through a fine wire or other sieve. The mixture No. 1 is applicable to articles where stiffness and cheapness are required. No. 2 is preferable where pliancy and strength are more required. But I think it proper here to state that the proportions above mentioned may be varied according to the different applications of the article to be manufactured. If varied qualities of stiffness or cheapness should be desired, the proportions of size and whiting may be increased till they make up one third of the mass. If flexibility be required, the quantity of dissolved caoutchouc in the compound No. 2 may be increased, and especially where great strength and pliancy are required. This last is also preferable for articles that are to be much exposed to the weather."

Letters patent April 20, 1839, to John Potter and William Horsfall, for "an improvement or improvements in cards for carding various fibrous substances, part of which improvements may be used as a substitute for leather."

Specification. "Our invention of, etc., consists in the manufacture of a new material or substance for receiving the wire teeth which have hitherto for the most part been set in leather, and we shall now proceed to describe the manner in which the same is to be performed and carried into effect. In the first place, we provide a woven fabric of a peculiar construction, which we manufacture as follows: We make the warp or chain of a material possessed of the greatest possible strength and the least elasticity, such as yarn or thread made of flax, hemp or cotton, which yarn or thread we prefer to be made of two or three folds or strands doubled and twisted together. The warp being in the loom, it is to be made into cloth by being shot or wefted into woollen weft—that is, with yarn or thread composed of sheep's wool.

"The cloth being woven it is next to be cleansed or scoured, so as to free it from any oil or other impurities, and milled, by which latter process the fabric is brought to the requisite thickness or substance by being milled up in width, or in the direction of the thread or yarn of wool.

"By this means we obtain a cloth capable of resisting a

very considerable strain or tension in the direction of the warp, while the body of the cloth itself remains exceedingly soft and porous. We find that for most kind of cards cloth milled up to such a thickness as that one yard in length by twenty-seven inches in width shall weigh from fourteen to sixteen ounces avoirdupois is the most suitable, though it will be evident that these proportions may be varied as circumstances may require.

"The middle qualities of sheep's wool we consider most suitable for making this description of the cloth, being preferable to either the finest or coarsest sorts. To persons engaged in the woollen manufacture these instructions will be sufficient to enable them to make the cloth. If the cards to be manufactured are intended for fillet cards, the cloth is next to be torn up lengthwise of the piece into strips of a suitable width; but if sheet cards are intended, the cloth is to be cut crosswise or in the direction of the weft, making the usual allowance as when using leather for the space on each side for the purpose of affixing the wire cards to the cylinder of the carding engine; a sufficient number of these short pieces of cloth are to be sewn together at the ends so as to form a fillet or belt, by which the subsequent operations will be facilitated.

"The cloth thus prepared is passed through a solution of india-rubber known to the trade as india-rubber varnish or cement, and in the passing of the fabric a quantity of the varnish will adhere to the surface, and the fabric in this state is wound tightly up and allowed to stand a few minutes, then is unrolled and passed a second time through the varnish, by which means a still further proportion of the india-rubber varnish will adhere to the cloth, and being again tightly wound up, it is to remain a sufficient length of time to allow the varnish to penetrate or become absorbed by the cloth.

"It is usually necessary to pass the cloth a third time through the varnish, after which we generally find that the cloth is saturated, and being again left as before in the coil, the whole mass becomes equally and completely penetrated by the varnish. Its being in this state may be known by

the cloth assuming a semi-transparent appearance. The coil is then unwound and exposed to the atmosphere, so as to allow the varnish to dry, after which it is to be drawn once or twice through the varnish, by which the cloth will imbibe a further portion of it, so as to fill up the pores or interstices which the operation of drying has left open.

" If this process has been properly conducted the fabric will now consist of nearly one third caoutchouc or india-rubber and two thirds cloth, by weight, but these quantities may be varied. The india-rubber or caoutchouc varnish or cement, being an article that may be freely purchased, and the modes of preparation being well known, it is unnecessary further to particularize it. The preparation of our improved material being thus far completed, we next cover it on each side with a mixture of ochre and weak size, which by destroying the adhesiveness of the india-rubber facilitates the subsequent operation of inserting the wire teeth, and also gives to the fabric more of the appearance of leather.

" When this coating is dry the compound fabric produced by the operation above specified is to be passed between a pair of weighty rollers, or otherwise submitted to a considerable pressure, by which means the fabric becomes firmer and more compact, and, in short, becomes possessed of the qualities which persons acquainted with the card-making business know to be so highly desirable—namely, that of being extremely elastic in the direction of the thickness of the fabric, so as to impart, as it were, the elasticity to the wire teeth when set, while in the direction of its length or warp it is nearly non-elastic. In this state it is ready to receive the wire which is to form the cards, for which purpose we prefer using the card-making machinery, and the process being exactly the same as that now in use for making leather cards, simply substituting the fabric or cloth above described in place of leather, it need not be described here.

" Though the process above described is the one we generally prefer for carrying out our invention, we sometimes vary the process in the following manner, which may in some cases be considered preferable :

"Instead of the fabric above described, composed of warp of flax, hemp or cotton, and of woollen weft, we use in this case a fabric composed entirely of sheep's wool, and milled to such an extent that one yard in length by twenty-seven inches in width shall weigh ten or twelve ounces avoirdupois, or thereabouts; this cloth is to be saturated with the caoutchouc in the manner already described, and afterward cemented with the india-rubber varnish or cement to a back of strong cloth, composed, like the warp in the former case, of flax, hemp or cotton, for which it is intended as a substitute, in order to prevent longitudinal stretching.

"The exposed surface of the cloth being covered with a coating of ochre and glue size, and afterward the whole fabric being submitted to considerable pressure from the action of rollers or otherwise, the process is complete and the fabric is now ready to receive the wire.

"Though we find the process above described perfectly adequate to the purpose of impregnating the woven fabric with caoutchouc, yet as the same is somewhat slow, we generally employ certain machinery or apparatus for producing the same result in a more economical manner, which we will now describe. . . .

"Having described the nature of our invention and shown how it is to be carried into effect, we would have it understood that we do not claim any of the machinery, apparatus or means herein described which are incident to the carrying out our invention, but we declare that our invention consists—

"First, of the mode of producing a cloth or fabric by combining sheep's wool and caoutchouc together with a third material, which third material may be either flax, hemp or cotton, or a mixture of the same, the fabric being fulled or milled to a proper thickness before applying the india-rubber, such fabric being peculiarly adapted to the making of wire cards, and also as a substitute for leather for other purposes.

"Secondly, we claim as our invention the application and combination of the woollen cloth, milled or fulled to a proper thickness, and afterward saturated with caoutchouc,

and cemented on a back of strong cloth, composed of flax, hemp or cotton, as a substitute for leather in the making of wire cards.

"And lastly, we would have it understood that we are aware that various descriptions of fabrics have been coated with india-rubber, and have or may have been used as a substitute for leather, and have or may have been employed in making wire cards ; we do not, therefore, claim the coating fabrics in general with india-rubber, but only the peculiar fabric above described."

The defendants pleaded : 1. Not guilty. 2. That plaintiff was not the true and first inventor. 3. That the invention was not at the time the patent was granted a new one as to public use in England. 4. That the invention was unfitted for the purposes described in the specification. 5. That the specification did not particularly describe the nature of the invention and the manner of its application.

The notice of objections also stated the grant of letters patent to Thomas Hancock, November 24, 1824, and March 15, 1825, for the invention of a substitute for leather, and alleged that large quantities of such artificial leather had been made into and used as cards before the date of the plaintiff's patent. The notice also stated that the invention was not a new manufacture, that the mode of using the cloth was not sufficiently described and was calculated to mislead, and that the invention was useless as to some of the purposes named.

Wilde, Bompas and *Addison* were counsel for the plaintiffs ; *Follett, Channell* and *Cowling* for the defendants. The nature of the evidence will sufficiently appear from the summing up of the judge.

TINDAL, C. J. Gentlemen of the jury, this is an action brought by Mr. Walton against Messrs. Potter and Horsfall for the invasion of a patent which was granted to the plaintiff for certain improvements in cards for carding wool, cotton, silks and other cloths, and which patent was granted to the plaintiff on March 27, 1834 ; and in answer to the charge which is made by the plaintiff against the defend-

ants, several pleas have been put in on the record. There is one plea upon which no evidence at all has been given before you—namely, that whatever the defendants did, they did by the leave and license of the plaintiff ; therefore, you may leave that out of your consideration, and find your verdict on the last plea at once for the plaintiff.

The first plea the defendants have put upon the record is that they are not guilty, and by that they mean to say, as indeed the course of the evidence has sufficiently shown, that they have not infringed the patent which has been granted to the plaintiff. It is not so common an occurrence to dispute the infringement of the patent as its validity. In the causes which ordinarily come before us the question is whether the patent is a good one or not ; but here there is a double inquiry to be made, and the defendants have a full right to avail themselves of it. It is, therefore, upon the present occasion a most important part of this inquiry to ascertain whether the plaintiff's patent has been infringed or not.

Now, according to the general rule upon this subject, that is a mere question of fact, and peculiarly for the consideration of the jury ; and it will be for you to say under the circumstances that have been brought in review before you whether that which has been done by the defendants amounts to such an infringement or not. Where a party has obtained a patent for a new invention or a discovery he has made by his own ingenuity, it is not in the power of any other person, simply by varying in form or in immaterial circumstances the nature or subject-matter of that discovery, to obtain either a patent for it himself or to use it without the leave of the patentee, because that would be in effect and in substance an invasion of the right ; and therefore what you have to look at upon the present occasion is not simply whether in form or in circumstances what has been done by the defendants varies from the specification of the plaintiff's patent, but to see whether in reality, in substance and in effect the defendants have availed themselves of the plaintiff's invention in order to make that fabric, or to make that article which they have

sold in the way of their trade ; whether, in order to make that, they have availed themselves of the invention of the plaintiff. The course which the evidence has taken has made it not an immaterial, but, on the contrary, a very necessary inquiry for you upon this first head of investigation to determine whether the defendants' patent, which they have taken out, is in effect borrowed from the plaintiff's or not, because there can be no doubt whatever that in all the defendants have done they have endeavored to clothe themselves with the right of doing by taking out the subsequent patent of 1839. The only evidence of infringement we have had before us is the purchase at the manufactory of the defendants of that little piece of card which was marked with the initials S. G., and there can be no doubt but that the fabric which was so produced in evidence before us is made upon the plan and according to the specification of their own patent, and therefore it will be not immaterial to call to your attention upon this first head of inquiry the specification of the plaintiff's, and next that of the defendants' patent, in order that we may compare them together and see whether there really is that variation in substance so as to give the denomination of a new discovery to what the defendants have done, or whether they are not following out the invention of the plaintiff, with some variation in the description, which may not allow it the name of a new discovery.

The plaintiff in his specification says, "I declare the nature of my invention to consist in the application and adaptation of the material known by the name of caoutchouc or india-rubber as a substitute for the fillets or sheets of leather which are commonly used in the construction of ordinary cards, and thus giving a superior elasticity and durability to such cards." He confines the description of his invention to the application and adaptation of india-rubber in lieu of leather to the cards ; that is the substantial part of the invention for which he claims his patent. He describes the manner in which this invention is to be performed, and the description he gives is this : "The regularity of distance and uniformity of the dents or teeth of

the cards are found to be better preserved by a piece of linen commonly called brown holland, or other like cloth, well glazed and cemented on to the back of the caoutchouc or india-rubber, as shown by a red line," which is mentioned in the plan ; and then he says that "the cloth when fastened to the caoutchouc continues to keep the dents or teeth more firmly in their places when in use, and the foundation or fillet being thereby made much stiffer, the action of the dents or teeth is less uncertain in their elastic movements. The cloth so cemented to the india-rubber or caoutchouc is to be affixed to the cylinder or board in the ordinary carding engine by nails ; but if it is to be affixed by cementing them, it is desirable to remove the cloth, which in this case should only be slightly attached to the india-rubber, and this will be found the best mode of applying the cards thereon." In a subsequent part he talks about the mode in which he requires the india-rubber to be used : "It may be as well here to observe that when I mention cement in this specification I always allude to what is now generally called india-rubber cement, and which, as it has now become an article of general sale, and may be bought by that name, I do not think it necessary further to describe the same ; but as the machines for cutting india-rubber are not generally known, and as I prefer caoutchouc or india-rubber in the state it is imported for my purpose, I will now describe the means which I use for cutting the caoutchouc or india-rubber." That it is unnecessary to trouble you with ; the only object is to show that he used the india-rubber in the state in which it is imported, by cutting a thin slice of it and affixing it to this fabric of brown holland, or other such like cloth, and carrying the dents or teeth through the cloth from the outside so as to form the subject of the patent, which is the card at the end. Having described the nature of his invention for this card, he says, "I do not claim any particular method or means of setting or placing the dents or teeth of the cards, nor do I claim the means herein described for pricking the cards, but have described the various parts as the means I have pursued and find to answer in effecting my improvements

in cards. And I do hereby confine my claim of invention to the application and adaptation of caoutchouc or india-rubber as the fillet or sheet, or medium in which the dents or teeth are to be set together in the manufacture of cards, and thereby obtaining a superior elasticity and durability to cards as above described ;" evidently therefore, in the beginning, the middle and the end of it, limiting the patent which he has solicited and obtained to the adaptation of india-rubber, coupled with the fillets of cloth which he puts at the back of it, giving elasticity and durability to the card.

This patent was taken out in the year 1834, and it appears that in the year 1837 the defendants for the first time purchased some of these cards ; and it appears also, upon evidence given by the defendants themselves in the course of this inquiry, that shortly after the time when Mr. Walton's cards had been purchased by the defendants experiments began to be made by one of the defendants at their manufactory ; and some time after that—namely, in the month of April, 1839—a patent was granted to the defendants for an improvement in cards for carding various fibrous substances.

Now, what you have to say is whether you are satisfied that the card produced before you in evidence, and which you may assume I think upon the evidence to have been made in accordance with the specification, is a specious variation in form only, an ingenious alteration in the mode of adaptation, or whether it is really and substantially a new discovery on the part of the defendants. In the one case it would be an infringement of the patent, in the other it would not. Now, the account they give in their specification is, " We do declare the nature of our invention of an improvement or improvements in cards for carding various fibrous substances, part of which improvements may be used as a substitute for leather, to consist in the manufacture of a new material or substance for receiving the wire teeth, which have hitherto for the most part been set in leather, and we shall now proceed to describe the manner in which the same is to be performed and carried into effect." Now,

they make it to consist of two parts—first, in the preparation of the cloth in the way I shall mention to you, and then saturating the cloth with dissolved india-rubber. They say, “In the first place, we provide a woven fabric of a peculiar construction, which we manufacture as follows: We make the warp or chain of a material possessed of the greatest possible strength and the least elasticity, such as yarn or thread made of flax, hemp or cotton, which yarn or thread we prefer to be made of two or three folds or strands doubled and twisted together, the warp being in the loom; it is to be made into cloth by being shot or wefted with woollen weft; that is, with yarn or thread composed of sheep’s wool. The cloth being woven, it is next to be cleansed or scoured, so as to free it from any oil or other impurities, and milled, by which latter process the fabric is brought to the requisite thickness or substance by being milled up in width or in the direction of the thread or yarn of wool. By this means we obtain a cloth capable of resisting a very considerable strain or tension in the direction of the warp, while the body of the cloth itself remains exceedingly soft and porous; we find that for most kinds of cards cloth milled up to such a thickness as that one yard in length by twenty-seven inches in width shall weigh from fourteen to sixteen ounces avoirdupois is the most suitable, though it will be evident that these proportions may be varied as circumstances may require.” Then, having got this cloth, this is what they proceed to do with it. “The cloth thus prepared is passed through a solution of india-rubber known to the trade as india-rubber varnish or cement, and in the passing of the fabric a quantity of the varnish will adhere to the surfaces, and the fabric in this state is wound tightly up and allowed to stand a few minutes, then is unrolled and passed a second time through the varnish, by which means a still further portion of the india-rubber varnish will adhere to the cloth, and being again tightly wound up, it is to remain a sufficient length of time to allow the varnish to penetrate or become absorbed by the cloth. It is usually necessary to pass the cloth a third time through the varnish, after which we generally

find that the cloth is saturated, and being again left as before in the coil, the whole mass becomes equally and completely penetrated by the varnish. Its being in this state may be known by the cloth assuming a semi-transparent appearance. The coil of cloth is then unwound and exposed to the atmosphere, so as to allow the varnish to dry, after which it is to be drawn once or twice through the varnish, by which the cloth will imbibe a further portion of it, so as to fill up the pores or interstices which the operation of drying has left open. If this process has been properly conducted the fabric will now consist of nearly one third caoutchouc or india-rubber and two thirds cloth, by weight; but these quantities may be varied. The india-rubber or caoutchouc varnish or cement being an article that may be freely purchased, and the modes of preparation being well known, it is unnecessary further to particularize it. The preparation of our improved material being thus far completed, we next cover it on each side with a mixture of ochre and weak size, which by destroying the adhesiveness of the india-rubber facilitates the subsequent operation of inserting the wire teeth, and also gives to the fabric more of the appearance of leather." That, in substance, is the description which they give, concluding by saying, "Though we find the process above described perfectly adequate to the purpose of impregnating the woven fabric with caoutchouc, yet as the same is somewhat slow, we generally employ certain machinery or apparatus for producing the same result in a more economical manner, which we will now describe." Therefore, the principle of the discovery for which they obtain their patent they profess to be the manufacturing of cloth of a particular fabric, and the saturating every fibre of this cloth with the dissolved caoutchouc or india-rubber, through which they afterward insert or force the dents or teeth.

Now, there can be no doubt whatever that, although one man has obtained a patent for a given object, there are many modes still open for other men of ingenuity to obtain a patent for the same object; there may be many roads leading to one place, and if a man has, by dint of his own

genius and discovery after a patent has been obtained, been able to give to the public, without reference to the former one, or borrowing from the former one, a new and superior mode of arriving at the same end, there can be no objection to his taking out a patent for that purpose. But he has no right whatever to take a leaf out of his neighbor's book, for he must be contented to rest upon his own skill and labor for the discovery, and he must not avail himself of that which had before been granted exclusively to another ; and therefore the question again comes to this—whether you are of opinion that the subject-matter of this second patent is perfectly distinct from the former, or whether it is virtually bottomed upon the former, varying only in certain circumstances, which are not material to the principle and substance of the invention.

Upon this part of the inquiry there have been various witnesses called on both sides, and you will judge of the value of what they have stated by weighing against each other certain contradictory testimonies, which cannot well be reconciled. On the part of the plaintiff there is the evidence of Mr. Brande, Mr. Daniell, Mr. Edward Cowper and Mr. Carpmael—all of them asserting, and the two gentlemen who were skilled in chemistry giving their reasons for it, that in their opinion, according to the best of their judgment, the discovery so called by the defendants is really not in any material circumstance different from that of the plaintiff's, and that it is really bottomed upon the same principle. On the other hand, you have the evidence of Mr. Farey, Dr. Ure and Mr. John Thomas Cooper, who have given their testimony to it to-day to a contrary effect ; Mr. Farey said that in his judgment and opinion there is a perfect dissimilarity between the one and the other. You must weigh one against the other ; the value of their respective testimonies will much depend, not only upon the reasons they assign for the diversity of their judgment, but a good deal also upon the manner in which they gave their testimony and approved themselves as witnesses before you.

That, then, is the first point. You will have first to say, Has the patent been infringed or not ? Then comes the

second inquiry, in which the defendants allege that the plaintiff is not the first and true inventor of the discovery ; and they then go on to say, thirdly, what for the purposes of this cause will be very much connected with the second plea, viz., that the invention was not new in England, but that it was publicly in use at the time the patent was granted. You are quite aware the granting of patents was limited by a statute so early as the time of James I., and patents were granted only to those persons who were the first and true inventors of the subject-matter for which the exclusive privilege was given. That was to secure the sole right of using their inventions to sagacious and ingenious persons, who often spent their lives in study, and who were ill requited without it ; but it was meant only as a reward to the first and true inventor, and though the matter may not have been used, the party is not entitled to his patent (and this plea expressly raises that question for your determination) unless he is the first and true inventor ; therefore, if the subject-matter of the patent has been discovered —has been published in a dictionary, for example—though it has not been reduced into practice, if a man merely adopts it, the merit is so small that his patent for it would be worth nothing ; and upon the present occasion the plea I now call your attention to, whether the plaintiff is the true and first inventor, will turn upon the inquiry whether he borrowed his invention from a former patent, which was taken out by Mr. Hancock ; because, on the part of the defendants, it is alleged that virtually and substantially the discovery, as it is called, of the plaintiff is no more than an alteration of a discovery of Mr. Hancock's ; that you will have to consider, applying the kind of inquiry and investigation which you had before submitted to your minds with respect to the comparison of the plaintiff's and the defendants' specification, to this new investigation as to the specification of Mr. Hancock and the specification of the plaintiff ; and that, in effect, is the same inquiry as the next plea, which says the subject-matter of this invention was publicly known in England at the time, or before the time (1834) of the date of the plaintiff's patent. It is not alleged,

and, indeed, there is no evidence at all that there were any cards which were made with any substance except leather, with the single exception of those which were made by Mr. Hancock, or by persons under his directions, and therefore it really, with respect to the two pleas, brings the question identically to this—whether the one patent is distinct in principle from the other, or whether it is merely the raising up again, after the expiring of the old patent, of a new one in substance the same as the plaintiff's. I have already read to you what the specification of the plaintiff's patent is. Let us see what says the specification of Mr. Hancock, and then call to mind the evidence which has been given on each side with respect to that part of the case. Mr. Hancock took out his patent in the year 1825, and he calls it a patent "for a method of making or manufacturing an article which may be, in many instances, substituted for leather, and be applied to various other useful purposes." He does not particularly apply his patent to the making of cards, but he applies it generally, as you will find by the instances which he gives, to a substitution for leather for nearly all the purposes to which leather could be used. He says, "My said invention consists in filling, saturating and combining various fibrous substances in their manufactured and unmanufactured state, with a composition which leaves the fibres sufficient flexibility, and at the same time unites and consolidates them into one mass, thereby increasing their strength and durability, and producing by these means a manufacture which may be in many instances substituted for leather and be applied to other useful purposes, such as soles for shoes and boots, hose-pipes, pails and other articles which have heretofore been made of leather, and also to other useful purposes, such as the roofs of verandas, corn and flour sacks, packing cloths and tarpaulins." And he goes on to give an account of the mode in which he makes this new article. He says, "As the same process is applicable to all the combinations, it will be necessary to describe the method I pursue in one case only, as any variation may be made in arranging the different substances at the discretion of the operator. I take a piece of cotton

cloth of any convenient size, and strain it on a board, and spread over it with a spatula or other convenient instrument a full coating of one of the compounds to be hereafter described. I then spread on or over the compound a layer of carded cotton somewhat similar to the article known by the name of wadding, spreading over this again another piece of cotton cloth prepared as the first; I then submit the whole to sufficient pressure between boards or plates of metal, either passing them through or between rollers or otherwise, to force the composition quite through the layer of carded cotton. I then carefully remove it from the boards or plates and leave it to dry, either in the open air or in a warm room heated to 80 or 90 degrees of temperature, and proceed to make others in the same manner. When I perceive that they are nearly or quite dry I again submit them to the press; or, if one of these strata is not sufficient to make up the thickness I require, I put two, three or four more together, spreading the said compound on the surfaces again, if necessary, and increasing the pressure." The next account he gives us of the article is of the compound in which this is immersed, and that is very material for your consideration. He says, "I make the compound or compounds with which I unite or combine the said substances as follows: No. 1. I take two pounds of caoutchouc dissolved in one gallon of equal parts of oil of turpentine and highly rectified coal-tar oil, six ounces of black resin, two pounds of strong glue size, and one pound of ochre, powdered pumice, or whiting, and mix the whole together." He goes on to No. 2, which is "one and a half pound of caoutchouc, dissolved as before stated, and one pound of strong glue size." Then he mixes these together, and he immerses the fabric which he has before described to you in it until it is thoroughly saturated.

That is the account he gives of his discovery; that of the plaintiff being the simple cutting of a slice of native india-rubber and fixing it by a cement which is well known to a piece of linen cloth, and then running the teeth of the card through it. Now, whether upon reading of it you think there is a concurrence of invention in the man who comes

second, and describes that second mode of producing that effect, or whether, when you weigh the mode by which the first is to be done by various steps, you see there is a real substantial distinction between that and the mode which is adopted by the successor, will be the question for you to determine. That, again, is not left without evidence on both sides, for here you have very strong evidence. On the part of the plaintiff you have Mr. Carpmael, who states himself to be a person familiar with these subjects, and having been long versed in them, and saying it is a matter perfectly distinct. Then you have Mr. Smith, a cotton-spinner, who is called for the purpose of saying that he had never heard of anything of the sort until the period of time when Mr. Walton took out his patent; and you have the witness, Abraham Crowder, who was called on the part of the defendants, who states that until this was known he never knew anything of the sort in use before; and you have the evidence of numerous witnesses who have been called from different quarters, to show that they were acquainted with the trade both in Scotland and in the west of England many of them, and in the north, where principally these matters are carried on, and who were much conversant with them, and they all state they never heard of cards being made of any other material but leather until Mr. Walton's were produced. On the other side you have the evidence of Mr. Farey, who states that, in his judgment, the two are perfectly similar—the principle upon which they are both made is the same. Then you have the evidence of Mr. Whiteby, and you have then the evidence of Mr. Hemmingway, who is the person who had adopted and used Mr. Hancock's invention, and several other witnesses, who have received cards made by him, to show they had put in use this invention of Mr. Hancock's, and not any other; and last of all you have the evidence of Mr. Hancock, the inventor himself, who certainly says his patent is not the same as Mr. Walton's; that he never understood it to be the same; nor, says he, is it the same as that which is made by the defendants; and that is stated in opposition to Mr. Farey, who, we understand, speaks as a

man of science on the subject. You have, on the other side, the evidence of Mr. Cottam and Mr. Brande, and what those gentlemen state is in contradiction or in opposition, as far as the scientific evidence is concerned, to Mr. Farey in the opinion he gives. That will be the question for you upon the second and third pleas.

Now we come to the fourth answer, which is that the specification does not particularly describe the nature of the invention. Generally speaking, the rule which is laid down upon occasions when the sufficiency of the specification is called in question is this—that as these specifications are drawn by men who are more conversant with the particular article than juries, who are selected indiscriminately from the public, and certainly much more than judges, whose knowledge is confined to one particular department, credit is given to witnesses, if they are conversant with the subject-matter of the invention, and are able to tell you, and you believe it, that they see enough on the face of the specification to enable them to make the article without difficulty. You know the object of the specification is that it is the price which the party who obtains the patent pays for it, and it would be a hard bargain on the part of the public if he were allowed to clothe his discovery and his description in characters so dark and so ambiguous that no one could make from it when the fourteen years have expired, and he should not have paid the price for which he enjoyed the exclusive privilege, but that he should have it in his own hands still for as long a period as he chooses ; and therefore it is always a proper answer when a patent is set up to say that you have not so described it, that it may be understood. Now, then, upon that you have the evidence, in the first place, on the part of the plaintiff of Mr. Carpmael and Mr. Cottam ; and on the part of the defendant, Mr. Farey says the description in the specification is not intelligible ; the part upon which the particular difficulty has arisen is the sentence to which I will call your attention. It is said that the part which is principally found fault with on the part of the defendants is the description as to the mode in which the teeth are to be affixed

in the card, and also the way in which the card, under certain circumstances, is to be affixed to the engine itself. It is said, "The cloth, when fastened to the caoutchouc, continues to keep the dents or teeth more firmly in their places when in use, and the foundation or fillet being thereby made much stiffer, the action of the dents or teeth is less uncertain in their elastic movement." It is alleged and stated, this leaves it in doubt—whether the teeth under all the circumstances are to be affixed in the card, while the fabric of cotton or brown holland is on the back, or not. Some of the gentlemen who have read this before you state they feel no difficulty, upon looking at the whole of it, in understanding what was intended—whether the card was to be used as a fillet card, or whether it was to be used by being fixed closely to the top or the back or any part of the cylinder; they understand that in either case the teeth were never intended to be put in until after the brown holland, whether it was to be lasting or temporary, only the brown holland was to be put on the top of it. You will say for yourselves whether that is made intelligible or not.

Then there is another difficulty pointed out, that "the cloth cemented to the india-rubber or caoutchouc is to be affixed to the cylinder or board or the ordinary carding engine by nails, but if it is to be affixed by cementing, then it is desirable to remove the cloth." It is said, "What is meant by this?" According to the evidence that was given by one person who read it, he says it is to be affixed; that is, that the card is to be affixed, and then you are to take away and remove the brown holland, which is only meant for a temporary covering, and fix it close to the machine itself—the back of the engine having the same effect as to the elasticity which is afforded, or, rather, with a view to resistance, as if there were a fabric of brown holland. However, you have artificers who state they should feel no difficulty in making from the description that which is intended to be made; you must say how far they speak correctly or not.

It is also said it is not useful for some of the purposes, viz., top and sheet cards, specified, and that is the last plea

you need consider. Now, there has been certainly no evidence called before us, that I am aware of, in which any experiment has actually been made with a top card or a sheet card and has failed. A great many witnesses have been called, who have stated their judgment and opinions that it would not succeed—one is surprised that the experiment has not actually been tried. The mode in which they state that the sheet card would not succeed is because the sheet card requires, as I understand, a very great lateral pressure, for the purpose of fixing it upon the cylinder ; and if you give it that great lateral pressure, it seems, according to the judgment of some of them, it would have the effect of loosening or altering the position of the teeth of the different cards—that they would tear off if you put nails in on the sides of the sheets—and such would be the violence of the pull in order to bring them together, that it would tear off the edges through which the nails went, and then they would become damaged and altogether useless. However, you have the opinions of those persons, of whom Mr. Bohannan is one and Mr. Whiteby is the other, and have on the part of the plaintiff Mr. Cottam, and I think one or two more, who state they see no reason why one should not be as useful as the other. Now, this question the fifth plea raises, and whatever the value of it is, it will be necessary for you to determine it on the one side or the other.

Gentlemen, that is in effect the whole of the case for your inquiry. I can fill up that by going through the whole of my notes of the evidence on the one side and the other if you wish it ; if not, perhaps it is better to leave it to you with this general view.

Verdict for the plaintiff.

Subsequent proceedings to set aside the above verdict appear *post*, under date November 18, 1841.

*Re WOODCROFT'S PATENT.***Privy Council, Feb. 11, 1841.**

(1 Web. P. C. 740.)

Extension. Practice on Hearing of Application.

Prolongation of patent refused on the ground of want of merits.

Practice respecting hearing of counsel where several parties enter caveats.

Application for an extension.

This was an application for an extension of the terms of the letters patent granted, 1827-28, to Bennet Woodcroft for "certain processes and apparatus for printing and preparing for manufacturers yarns of linen, cotton, silk, woollen or any other fibrous material."

It appeared that during the first four years of the patent printed cotton yarns and goods manufactured from them were in great demand, and that a considerable profit (£7,000) was realized, but that from the removal of the duty on printed calicoes and other causes a large capital invested in working the patent ceased to be profitable and the invention to be little used, so much so that in 1835 the patent right, on a certain valuation of partnership effects, was not estimated at more than £600. In 1839, in consequence of the importation of French silks, manufactured of printed yarns, the invention under a somewhat improved form became very valuable. It appeared that the method described in the specification answered perfectly well for simple patterns, but that it failed for the more elaborate patterns and the brighter colors, which required the yarns to be washed after printing.

The application was opposed on the ground (among others) that the invention in its present improved form was introduced from France in 1839 by other persons than the petitioner.

Application refused.

An application having been made to fix the day for the

hearing of the petition, the counsel for the petitioner applied to the court to know the rule respecting the appearance by counsel of the parties entering caveats, and whether each party opposing would be entitled to be heard by two counsel.

Lord BROUGHAM observed that the rule respecting the number of counsel entitled to be heard, being the same here as in the House of Lords, viz., two only on either side, two counsel only would be heard to oppose the petition, unless the parties had independent and distinct grounds of opposition, founded on separate and independent interests.

*Re COATES'S PATENT.***Chancery, March 19, 1841.**

(10 L. J. Eq. 248.)

Where a caveat had been lodged against the sealing of a patent, and the patentee succeeded in a petition, opposed, that it be sealed forthwith, *held*, that the Lord Chancellor had jurisdiction to give the costs only, and not the costs, charges and expenses occasioned by the caveat and opposition.

Petition for extension of order giving costs.

A caveat had been lodged at the Great Seal Patent Office to prevent the petitioner's patent for "improvements in the forging of bolts, spikes and nails" being sealed. The ground of objection was want of novelty. In August, 1840, Coates petitioned the Lord Chancellor to discharge the caveat and seal the patent forthwith, and order the objectors to pay the costs, charges and expenses of and occasioned by the application. The matter was referred back to the Attorney-General to report whether certain machines in dispute in a certain suit were included in the petitioner's patent, and report having been returned that they were, the petitioner thereupon asked an order that the patent be forthwith sealed, and that the respondents pay the costs

occasioned by the caveat and petition and consequent thereon.

Counsel for applicant cited an order made by the Lord Chancellor in *Re Cutler's Patent* (not reported), in which, doubts having been expressed whether the Lord Chancellor had jurisdiction to order the payment of costs, after investigation, costs occasioned by the caveat, etc., were given to the petitioner, the patentee.

Upon March 19, 1841, an order for the payment of costs, charges and expenses, as prayed, was drawn. It then appeared that costs only and not expenses were given in *Re Cutler's Patent*, a petition for an extension of the order therein having been denied, with costs.

LORD COTTENHAM, L. C. In the present case, as in all litigated cases, the successful party can only have such costs as the law allows. There is no ground shown in the present case for enlarging the costs ordinarily given to costs, charges and expenses, any more than in any other case.

NEILSON v. HARFORD.

Exchequer, N. P., May 6, 1841.

(1 Web. P. C. 295.)

Presumptions as to Patents. Improvement as Infringement. Construction of Specification. Title. Utility. Experiment.

Patent rights are not to be tried with a view to their defeat.

Where the invention consisted, as claimed by the plaintiff, in applying air, heated while in transit, *held*, that however great the improvement which the defendant's apparatus for accomplishing that object might be on that described in the specification, it was no less an infringement.

Specification and patent should be construed together, in determining validity.

The title need not give any idea of the invention ; it is sufficient if the specification is consistent with it.

The amount of benefit effected by the invention is immaterial.

Ordinary skill and knowledge such as practical workmen possess is the test of the sufficiency of the specification in disclosing the invention.

It is not necessary that each part of an invention should have been actually

tried, and proved to answer ; the evidence of scientific persons that it would answer may be sufficient.

The intelligibility of the specification is a question for the jury.

The omission to mention in a specification anything which may be necessary for the beneficial enjoyment of the invention is a fatal defect.

Otherwise if such omission goes only to the degree of the benefit.

If the apparatus described can be used beneficially in its simplest form, it is no objection that great improvements may have been made.

If experiments are necessary for the production of any beneficial effect, the patent is void.

The omission to mention in the specification anything which the patentee knows to be useful is a fatal defect.

If the apparatus described in a specification can be used beneficially in its simplest form, it is no objection that great improvements may have been made.

Action for infringement.

The patent in suit, granted to J. B. Neilson, September 11, 1828, "for the improved application of air to produce heat in fires, forges and furnaces where bellows or other blowing apparatus are required," is set forth in connection with Neilson *v.* Thompson, reported under date December 24, 1840 (*ante*, p. 136).

The other facts appear in the summing up of the court.

The declaration, which was in the usual form, assigned as breaches : 1. That the defendants did use and put in practice the invention by smelting, manufacturing and making divers, etc., tons of iron, on the improved plan and principle of the invention, and in imitation of the invention. 2. Did smelt, manufacture and make divers, etc., tons of iron on the improved plan and principle. 3. Did counterfeit, imitate and resemble the invention, and did make divers colorable additions thereto and subtractions therefrom, whereby to pretend themselves to be the inventors and devisers thereof, and did put in practice the imitations, additions and alterations, as aforesaid, and pretend themselves to be the inventors of the invention. 4. Did smelt, manufacture and make divers, etc., tons of iron, with certain other improvements in the process of such smelting, manufacturing and making, which were intended to imitate and resemble, and did imitate and resemble, the invention, and thereby counterfeited the same.

The defendants pleaded : 1. Not guilty. 2. That Neilson was not the true and first inventor of any invention for the improved application. 3. That the invention was not new as to the public use and exercise thereof, within. 4. Setting out the specification, and averring that Neilson did not by any instrument in writing particularly describe and ascertain the nature of his supposed invention, and in what manner the same was to be performed. 5. That the invention was not, at the time of making the letters patent, nor has been, of any public or general use, benefit or advantage whatsoever. On these pleas issues were joined.

The defendants delivered with their pleas the following objections. The defendants in this action, besides denying that they have infringed the patent in the declaration mentioned, intend at the trial of this cause to rely on the following objections : that the said patent is void, as being for a principle ; that the terms in which the subject of the patent is described, viz., an invention for the improved application of air to produce heat in fires, forges and furnaces, where bellows and other blowing apparatus are required, are ambiguous, and it is doubtful whether the patent is for the invention of the application of hot air or only for an improved mode of applying hot air. That Neilson is not the first and true inventor of the supposed invention. That the supposed invention was publicly used and put in practice before the granting of the letters patent. That the invention, before the date of the letters patent, had been publicly disclosed and printed in divers philosophical and other books, and among others in a certain treatise or paper published by Mr. James Sadler, in *Nicholson's Journal of Natural Philosophy*, April, 1798. (See *Neilson v. Thompson*, above.) That the introduction and application of heated air into furnaces for the purpose of producing an intenser heat was in 1825, and before the date of the letters patent, made known by the invention of Mr. Chapman's process for creating combustion and consuming smoke (*ib.*). That the application of atmospheric air beyond its ordinary temperature, to facilitate the smelting of iron and other ores, is claimed generally by the patent, whereas that application

was known and practised both in England and Scotland prior to the date of the letters patent, and among other places at Glasgow and Irvine, in Scotland, and at Liverpool and in London by various iron-founders, anchor-smiths and other persons engaged in the manufacture of iron ; and prior to the date of the letters patent the principle of the application of heated atmospheric air to fires, forges and furnaces had been disclosed in the specifications of two several patents which had been obtained—the one in December, 1816, by the Rev. R. Stirling, for his invention for diminishing the consumption of fuel (*ib.*) ; the other by Mr. T. Botfield, in the month of January, 1828, for his invention of certain improvements in making of iron, or in the method of smelting and making of iron (*ib.*) ; and also the principle of the application of heated air to furnaces, in 1825, and prior to the date of the letters patent in the declaration mentioned, had been made known and put into practice by one Mr. John Jeffries and Mr. F. Patten, of the Grove Court Foundry, Southwark.

The defendants further contend that if the invention claimed is an improved mode of applying heated air to fires, forges and furnaces, then the patent is void, because no sufficient specification of the invention has been enrolled in conformity with the provisions of the letters patent in that behalf ; that the description of the apparatus to be employed is so defective that no workman of ordinary skill would be able to manufacture the apparatus merely by reading the specification ; that the specification is calculated to deceive. That the mode of applying hot air by means of an air vessel or receptacle, which is vaguely described in the specification, is substantially the mode or apparatus for which Mr. Botfield had previously obtained his patent. That the specification, so far as it can be understood as descriptive of a particular apparatus for forming and supplying hot air, describes an apparatus which does not answer the purpose. That the specification is invalid on account of its general vagueness. That the specification is defective, inasmuch as it does not describe the kind of furnace to which the invention is applicable, and it is not applicable

to all kinds of furnaces. That the apparatus described in the specification to be employed for the purpose of heating air is so defective that it is incapable of producing any beneficial effect in the blast furnace. That the apparatus used by the defendants is wholly different from that described in the specification, and upon a different principle, and it was invented at the Calder Iron Works, and other iron works near Glasgow, in Scotland, and by Mr. J. Jeffries and T. Patten, at Southwark, and not by the said Neilson.

That if the apparatus described by Neilson in his specification could be made to raise the atmospheric air to a sufficient degree of heat, it could not be used without a water twire for introducing the hot air into the blast furnace. That the apparatus which the defendants do use, and any other apparatus which would be capable of raising the atmosphere to a sufficient degree of heat, could not be applied to the blast furnace without the use of a water twire.

That it is alleged in the specification that the size of the air vessel must depend upon the blast, and on the heat necessary to be produced ; that for an ordinary smith's fire or forge an air vessel or receptacle capable of containing 1,200 cubic inches will be of proper dimensions, and for a cupola of the usual size for cast-iron founders, an air vessel capable of containing 10,000 cubic inches will be of a proper size. For fires, forges and furnaces upon a greater scale, such as blast furnaces for smelting iron, large cast-iron founders' cupolas, air vessels of proportionally increased dimensions and numbers will be required ; whereas, in order to produce the effect required, the heating apparatus ought to be made of such a construction that the surface exposed to the action of the heat should be in proportion to the quantity of air required to be heated, and that instead of the vessel or receptacle being enlarged when a greater quantity of heat is required, the heating apparatus must be reduced in size and the surface increased in extent, so as to obtain the maximum of heating surface in proportion to the quantity of heated air required.

That it is therein alleged that the air vessel or receptacle may be conveniently made of iron, but as the effect does not depend upon the nature of the material, other metal or materials may be used ; whereas, in fact, no other metal can be used which will effect the desired object so well and at such small expense as iron. Also, that the sizes and proportions of the air vessels mentioned in the specification rendered the alleged invention inoperative and useless. The defendants further object that the invention, as described in the specification, is of no public use or benefit ; that the heated air cannot be introduced into smelting furnaces by a simple pipe, as mentioned in the said specification.

Follett, for the plaintiffs. The plaintiffs are proprietors of a patent for a discovery of the greatest importance. It has brought into operation fields of iron and coal before supposed impossible to apply to the smelting of iron. It has been in use now for many years, and up to this time, I believe, Mr. Neilson has always been considered, both in this country and on the Continent, as the inventor and the discoverer of the process. He has had the advantage of the patent, and it has been and is now a most valuable one. It will expire in September, 1842. Although it has a short time to run, it is of importance to the proprietors that it should not be infringed during that time.

Before this invention the blast was produced by a blowing power, as a pair of bellows ; it then passed through the regulator and entered in a cold stream into the furnace ; and at that time there was a very strong opinion entertained, not only by iron manufacturers, but by persons who had scientific knowledge on this subject, that it was better for the purpose of smelting iron that the stream of air which was so produced by the blowing apparatus should enter the furnace cold. It had been observed that the furnaces for the smelting of iron worked very much better in the winter than in the summer months, and parties had thence concluded that it was better that the air should enter the furnace cold ; and so far had that notion spread that one of the great iron manufacturers, who in the course of

this cause will be called before you as a witness, had thought it to be of so much importance that he was at considerable expense to prevent any heat being communicated to the air passing into the furnace. The air, then, at this time was always introduced into the furnace cold.

Mr. Neilson was led to conceive a contrary notion, which, I believe, originated from observations that he had made in the common forge of a blacksmith ; from these and various experiments he conceived that the effect upon the furnace for the smelting of iron would be very considerably increased by introducing the air into the furnace hot instead of cold. Previous to this discovery coal could not be used in its primitive state, but now you may use the coal in Scotland, which is a great deal worse than the coal in Wales. The iron ore which was sent away from the places producing it in consequence of the expense of converting the fuel into coke is now manufactured into iron at those spots. And there has lately been a still further advantage in consequence of this discovery, which is the subject also of a patent, which is now in litigation in another court, but which has shown the extraordinary effect at least of this patent of Mr. Neilson's. In Wales there is a coal called stone coal, or anthracite, which could not be used at all for the smelting of iron. Since this discovery of Mr. Neilson's it has been found that the anthracite may be used as well as other species of coal. This was discovered by a gentleman of the name of Crane, who has taken out a patent for it ; but he cannot use the hot blast without a license from Mr. Neilson, and under that license he is now working his patent.

In applying to practice the principle which may be so advantageously used in the smelting of iron, he does not at all interfere with the blast apparatus, nor with the old furnace, or the mode of filling the furnace, or of applying the fire, or any of the old processes of smelting iron ; but his plan is to have between the blowing apparatus—that is, between the regulator, which was a part of the blowing apparatus in the old system, an air vessel or vessels, which shall be air-tight, or tight enough to receive the air ; that

those vessels shall be subject to heat ; that they shall be placed over the fire and heated, and that the air from the blowing power should pass into those air vessels so subject to heat so as very materially and considerably to increase the temperature of the air, and then that from those air vessels it shall pass along the tubes in the usual way through the arches or twires into the furnace. The consequence, therefore, will be that by adopting this mode of placing the vessel or vessels between the blowing power and the furnace, and heating those vessels, the air will pass through vessels which are subject to the fire, which will become hot, and then enter the furnace in a heated state.

There is no doubt this is a simple process, and, like most other discoveries when once made, appears to be very easy to be carried into effect. But the smelting of iron had been conducted in this country and on the Continent for a great number of years, and nobody had ever thought of, or, rather, applied the invention, until Mr. Neilson took out his patent in 1828.

The defendants say that they have not been guilty under the circumstances of an infringement of this patent. Now, Mr. Neilson says, I do not claim any particular shaped vessel, I do not claim any particular sized vessel ; the vessels may be of different dimensions, they may be of different shapes, they may be different numbers ; that will depend on the furnaces in which they are used ; and, moreover, if you once apply this invention and discovery of Mr. Neilson's, and use a vessel of a particular shape, and in the course of time find that a vessel of a different shape may answer better, that it may save fuel, for instance, or increase the heat, you are perfectly at liberty to alter the shape of the vessel or the size of the vessel through which the air passes ; but the patent cannot be evaded in that way. While Mr. Neilson's patent is in force, every vessel, no matter what its shape, no matter what its size, through which the air passes from the blowing power for the purpose of being heated to go into the furnace, would be protected and covered by this patent, because the patent is for that discovery of applying the heated air to the furnace,

and pointing out the mode in which that heated air may be applied. Mr. Neilson never could, nor could any one who was intending that this should be of practical use or benefit, have laid down any particular mode or shape in which these vessels were to be constructed. Any person of ordinary skill would know this, that the larger the surface of the vessel which was exposed to the fire the greater would be the heat, therefore you would get the greater heat by making your vessel in such a way as to expose a larger surface to the fire. You might also by the construction of the vessel economize the fuel, which was placed, not in a furnace for smelting, but in a furnace for heating the vessel through which the air passed. That may be done by altering the shape or size of the vessel, and the consequence is that, although this discovery of Mr. Neilson's is now in general use in this country, the forms and size of the vessels vary at different times and places ; but whatever be the form, whatever be the size of the air vessel or vessels through which the heated air passes, I say on the part of Mr. Neilson, and I am quite sure I shall have my lord's sanction for it, that this patent covers any attempt to pass the air from the blowing power through an air vessel which is heated, and then conducting that air in a heated state into the furnace.

Now, with respect to the vessel used not being an infringement, I cannot conceive for one moment that any question or doubt can arise on the subject at all. I would concede, if it were necessary for the purpose of this argument, that this mode of constructing the vessel is an improvement upon the old. It may be such an improvement, for aught I know, as would have entitled the party who discovered it to a patent ; but that was not the defendants ; they did not invent it or discover it, because it was in common use, and in use by a person who had a license from the plaintiffs ; this may be a great improvement upon the old vessel or the vessels that were first used ; but this would not the least interfere with Mr. Neilson's patent.

If Mr. Neilson has discovered the principle of applying the air heated to the furnace, and shown the mode in which

that can be practically carried into effect by passing air through a vessel heated, and subjecting the air to the action of heat in that vessel before it enters the furnace, that is the essence of his discovery, and that it is which he is entitled to be protected in ; and no one who makes a discovery of this sort could be entitled to any advantage from it whatever, except so far as he had permission of Mr. Neilson, or as he derived authority from Mr. Neilson, to use the principle of Mr. Neilson's patent. For if it were otherwise you will observe in one moment that Mr. Neilson, notwithstanding the great advantage of this discovery, the great national benefit that it is now conferring upon the country, may be totally deprived of all remuneration of every sort or kind, because it would be only for the parties to say, I will use a vessel of a different sort, or I will use tubes or pipes which pass in this way ; I do not use a square vessel, I do not use a round vessel, I use a vessel of this sort ; they will have a right to say at once, Mr. Neilson is not entitled to protection for his patent at all. I believe no doubt can be entertained upon it ; I say so unfeignedly, and I am quite satisfied that my lord will tell you so, and that under this specification Mr. Neilson is entitled to the full protection of the principle which he has discovered, and which he has practically found the means of carrying into effect ; and that so long as his patent is in force he is entitled to the advantage of that principle and the practical application of it.

Lastly, the invention is said not to be of any public use ; what can be the meaning of such a plea I know not, because if any invention that ever was discovered was of public use, this is one ; there is none which has produced so great a revolution or so great a saving in the manufacture of iron, and occasioned such great changes both in England and Wales.

Campbell, Attorney-General, for the defendants. The question that you will have to determine is whether the defendants have infringed a valid patent of Mr. Neilson's. There has been read to you an admission which they were at all times ready to make ; there has been here no disguise, no concealment ; they have openly done and proclaimed to

the world what they have done, which is making use of the apparatus that now is before you ; and what is that apparatus ? It consists of a series of pipes, two of them horizontal and the others vertical, and by this apparatus the air being introduced into one of the horizontal pipes, there is a stop hereabouts which prevents it from going farther in that horizontal pipe. It is then obliged to cross over to the other horizontal pipe. It then makes a progress in that horizontal pipe until there is another stop that makes it cross over again to the other side ; and so it traverses from side to side, until at last, passing through a great number of these heated tubes, it reaches a temperature of 600 or 700 degrees, and at that temperature it is introduced into the blast furnace by means of the water twire. That is our process, and you are to say, under my lord's direction, whether there is anything in point of law to prevent the defendants from manufacturing iron by the assistance of that apparatus.

There is no doubt that the application of the hot blast to the making of iron, according to the present practice, is an improvement ; but why was the patent a dead letter for nearly half its term ? My learned friend, Sir W. Follett, said that the greatest discoveries shock old habits and notions ; that reason and experience and time are necessary for overcoming the prejudices. But the fact is that the invention was a failure until the pipes or tubular form of vessel was introduced. The specification gives no information by which the invention could be successful. And is it to be endured that if there is a new mode which is discovered of which Mr. Neilson had no notion—if there is a new mode discovered by which hot air may be advantageously employed in the smelting of iron, that all attempts to put that in force are to be treated as illegal and wrong ? That is not the law. The law of England respecting inventions is founded on reason and justice and public policy. It is this—that when there has been an important discovery in the arts and manufactures, the discoverer is to be rewarded by having the exclusive use of it for a certain period of years ; but then there is a condition imposed upon him

—there is a bargain ; in consideration of his having this monopoly, he must point out to all mankind how the invention may be used, and he must do that in a manner which admits of no doubt, which any person can understand, which any person can put in practice. There is not the smallest ground for saying that Mr. Neilson has made the supposed discovery of this apparatus which lies before me, and that he has described it in his specification ; for unless he has described what substantially amounts to this in his specification, then either his specification is bad or there has been no infringement of the patent on the part of the defendants.

The title of the patent has not the most distant allusion to the hot blast ; it will apply as well to the cold blast. My lord will see that this is not at all for any alteration in the temperature of the air ; it is for an improved mode of applying air, not altering the quality of the air. This was a clear deceit upon the Crown in the granting of this patent if Mr. Neilson had had in his mind that it was the air that was to be heated ; and having in his mind that the air was to be heated, he says that he has found out merely an improved mode of applying air to produce heat in furnaces ; would not that apply equally to the cold blast as the hot blast, because in the cold blast you do apply air for producing heat in furnaces ? Then why, if he knew at the time he took out this patent, if he intended that the air was to be heated before it was introduced into the furnace —that is the principle upon which he relies—why did he not say so ? I say that under such a title he had no right at all to specify what we call the hot blast. That is not an improved mode of applying air. What comes within the scope of that title is an improved mode of merely making the common atmospheric air as it comes from the open air pass into the blast furnace. And if he had made any improvement of that sort, which well he might, then such an improvement might be specified under the title.

But supposing him to be at liberty to specify a mode of using the hot blast, is a specification for the beneficial use of a hot blast sufficient ? I will state what I understand to

be the principle on the subject. There is a bargain between the patentee and the Crown, representing the public. In consideration of the patentee enabling any person of common skill and experience to make use of his invention, the Crown gives him the exclusive right to make use of it for the period of fourteen years. But not only in point of law impliedly, but expressly by the very terms of the patent, a condition is imposed that he shall specify the invention ; that is, that he shall describe how it is to be carried into effect. The proviso obliges the patentee, by an instrument in writing under his hand, particularly to describe and ascertain the nature of the invention, and in what manner the same is to be performed. Now, these things are prescribed upon the face of the patent itself as conditional. He must not only state the nature of the invention, but he must state in what manner the same is to be performed ; and he is to cause the same to be enrolled in the High Court of Chancery within six months next and immediately after the date of the said recited letters patent. This period of six months is given for the express purpose of enabling the patentee in the intermediate time to perfect his experiments ; to draw up a complete specification ; to disclose to the world, not only the nature of his invention, but how it is to be carried into effect. The motive for giving six months to prepare the specification is that he may have ample time to prepare such an instrument as will effectually answer the purpose that is intended.

Now, what ought that instrument to contain ? I apprehend that this is the rule upon the subject. It is a fundamental rule, on which all others for making and judging of a specification depend, that the secret must be disclosed in such a manner that men of common understanding, with a moderate knowledge of the art, may be enabled to make the subject of the patent. Nothing to invention, nothing to experiment. Extraneous matter, however learned, must not be introduced to darken it. Though it is addressed to the public in general, it need not be so circumstantial or so explanatory that persons entirely ignorant of the elements of the science from which the subject is taken may thereby

alone be able to learn and use the invention. Nor, on the other hand, should the description be so concise as to become obscure. But it must be intelligible and useful to persons of moderate knowledge, not entirely ignorant, but of moderate knowledge of that art to which it relates. The clearness of the description will of course depend upon the matter of the invention ; but upon the whole it may be observed that if a person of moderate capacity, having a little knowledge of the science which led to the invention, can immediately see the method pointed out, and easily apprehend the purport for which the subject was invented, without study, without any invention of his own and without experiments, the disclosure is fully and fairly made.

There are no diagrams, plans and nothing whatever in the specification to fix him to what the invention is. And before I proceed to the terms of the specification I must draw my lord's attention to this other additional objection, that it is utterly impossible for any person who reads the title of the specification to say for what the claim is made ; whether it is the application of hot air to the smelting of iron, or whether it is for some pretended general vague method which he supposes he has discovered. Gentlemen, if that were so, that again would be a fatal objection, because, although this is not an odious monopoly, it is a monopoly during the currency of the patent, the public are entirely excluded from the use of the process that is legally covered and protected by the monopoly. Therefore the law requires that confines shall be distinctly and broadly marked out, so that the public may know whether they are exercising a legal right or whether they are infringing the property of another. It is, therefore, indispensably necessary that the specification, taken together with the title, should distinctly denote what it is that the patentee claims as his invention, and of which he says that he is to be entitled to the exclusive use during a period of fourteen years. Now, looking at his title and specification, what is it that Mr. Neilson says he is to have the exclusive use of ? His title is "improved application of air to produce heat in fires, forges and furnaces ;" then during fourteen years are

all mankind to be debarred from making any attempt at improving the application of air to produce heat in fires, forges and furnaces ? Well, then, when you come down to what he specifies, what does he specify ? Does he specify a principle ? Does he claim all modes by which heat is to be communicated to the air between the blowing apparatus and the furnace ? I think my learned friend says that he does. He says that any mode whatsoever by which, in the intermediate space between the regulator (which is taken to be part of the blowing apparatus) and the blast furnace, heat is communicated, by whatever means, whether it be in a sphere, or in a cube, or in an enclosed vessel—of course it must be an enclosed vessel— [PARKE, B. It is not necessary, because Mr. Botfield's patent is one in which it is not. If it is the application of heat to a furnace in Mr. Botfield's patent, it is not by heating the air in an enclosed vessel.] Not in that part to which your lordship refers. [PARKE, B. Therefore I suppose what he claims is every method of heating the air in an enclosed vessel of any shape or description between the blowing apparatus and the furnace.] I suppose so. *Quod valeat non dixit*—if he did mean to say so, he has not said so ; and that is one of my objections, because he has said no such thing, and one of the uncertainties and one of the ambiguities of which I complain is that he has said no such thing ; and then, I say, that if he had said so, without more particularly designating the method by which his process was to be carried into effect, he would only have rendered his specification more vicious.

But now let us examine the terms of the specification, which, as you observe, is without any drawing whatever. I believe that the almost invariable practice now is to accompany a specification with drawings—and why ? Why, the specification should be a working plan, it should enable the mechanic to carry the invention into effect. The rule, my lord will remember, in Mr. Watt's famous case was this, that a mechanic acquainted with the steam-engine before Watt's invention should be able to perfect Mr. Watt's invention. Mr. Watt's invention was held to be properly specified, because a common mechanic—the word mechanic

is used—because a mechanic acquainted with the old engine before Mr. Watt's improvements, looking to Mr. Watt's specification and to nothing else, could make all Mr. Watt's improvements ; and it was proved that they did make them. Here not a single instance is given of any person who, not having seen the apparatus before looking to the specification, made the apparatus and applied it to the smelting of iron. Notwithstanding all the pains that have been exerted —you see, you have had witnesses called from Wales, from all parts of England, and from all the coal country and the iron country in Scotland—you have had scientific witnesses called merely to give speculative opinions—but you have had no one single instance brought before you of any person who, taking this specification in his hand, and not being previously instructed with the mode in which the hot blast was to be applied, constructed an apparatus whereby the hot blast was beneficially applied to the smelting of iron. Upon that ground, I say, the plaintiffs' case entirely fails. We have been told that this is a vessel where you have one horizontal tube, another horizontal tube, and a great series of vertical tubes communicating with the horizontal tube, and stops in the horizontal tube whereby the air is propelled and made to cross from side to side so that it may be properly heated ; and this is called a vessel. Why, in one sense it may be a vessel, as if it were twenty miles long and consisted of five thousand pieces. Why, you may call it a vessel if you like, but the specification is to speak the common language of mankind ; that is, a vessel which would be understood to be a vessel in common parlance, or at all events by a person of moderate skill in the department of art to which the discovery belongs. Throughout there not only is no suggestion of a succession of different pipes, but that is clearly excluded, because it is supposed that there is to be one vessel. Just observe. It is admitted that there is only to be one vessel as to the smith's forge ; it is admitted that there is only to be one vessel as to the cupola. It is quite clear that the patentee contemplated that the same process was to be adopted in the blast furnace, only increasing the dimensions of the vessel or having two ; that

is, two to go in at different times. [PARKE, B. "Dimensions and numbers."] That is not multiplying the pipes ; that is numbers *eiusdem generis*, vessels as before described, of the same construction and on the same principle. The specification shows that Mr. Neilson contemplated that the air was to pass through his vessel without interruption, without any disk or anything to detain it against the heating surface ; it was to go through in a current. Then as to size ; this is to depend on the blast, and on the heat necessary to be produced. Thus, as the blast and heat to be produced are increased, so the size is to be increased. That is utterly false, for if you were to increase the size in that proportion you would utterly fail ; you would have a form which would not give the heating surface. This, then, is an entire misdirection ; instructions are given which, if followed, must produce an inevitable failure.

Further, the following passage, "the form or shape of the air vessel or receptacle is immaterial to the effect, and may be adapted to the local circumstances and situation," is totally false. The effect is producing heat in the air contained in the vessel ; now, it is perfectly well known that, although the air may be heated in a cube of a foot, yet if the cube be increased the air will not be heated at all. How, then, can the form be said to be immaterial ?

There is another point, the omission in the specification of all mention of the water twire, which is entirely fatal. It is admitted that without the use of the water twire the hot blast cannot be beneficially used ; the heat of the air is so great on entering the furnace that unless there be some contrivance for cooling the pipe by which the heated air is injected the application must fail.

For these reasons the specification is bad, and the patent cannot be supported. The legitimate object of the patent was the smith's forge and smelting cupola ; for these Mr. Neilson might have had a valid patent, if he had entitled it properly and given a proper specification ; but he has extended his patent beyond its proper limit, and endeavored to embrace a subject for which he merely throws out a hint ; in respect of the smelting of iron, it is a patent for an idea

not so much as a principle, and cannot therefore be supported.

[No witnesses being called on the part of the defendants, Follett directed attention to the terms of the statute 5 and 6 Will. IV., c. 83, s. 5, respecting the notice of objections, and required them to be read. The question was then raised whether such reading at this stage of the cause would not give a right of reply.

PARKE, B. The words of the statute are, no objection shall be allowed to be made on behalf of the defendant unless he prove the objections stated in such notice, not unless he prove the notice. I think it must be considered as a kind of notice appended to the pleas as a notice of set-off, and that therefore, in truth, the attention of the court should be called to it as part of the plaintiffs' case. Let them be simply read. The proper course would have been, I think, that they should have been read at the time of the pleadings being opened.

The objections were then read.]

PARKE, B. [having stated the pleadings]. Now, there is no question whatever in this case but that this invention of the hot blast, as used at the time this action was brought and some time before, is not simply beneficial, but highly valuable to the arts, and a very important discovery has been either made by Mr. Neilson, or he has led to a most important discovery, and there is no doubt that the invention he made was an invention which turned out to be ultimately an invention of the greatest utility, and I entertain no doubt or difficulty myself in adopting the observation that has been made by Sir William Follett as to the mode in which these questions of patent right are to be decided. Half a century ago, or even less, within fifteen or twenty years, there seems to have been very much a practice with both judges and juries to destroy the patent right, even of beneficial patents, by exercising great astuteness in taking objections, either as to the title of the patent, but more particularly as to the specification, and many valuable patent rights have been destroyed in consequence of the objec-

tions so taken. Within the last ten years or more the courts have not been so strict in taking objections to the specification ; and they have endeavored to hold a fair hand between the patentee and the public, willing to give the patentee, on his part, the reward of a valuable patent, but taking care to secure to the public, on the other hand, the benefit of that proviso which is introduced into the patent for their advantage, so that the right to the patent may be fairly and properly expressed in the specification. Upon this occasion I have only to invite your attention to the evidence, and to desire you to decide all questions arising upon the specification, without any bias on either side, with no desire to give the public the benefit of this patent by tripping it up, but fairly to exercise your judgment between the patentee and the public.

Now, the best way of disposing of this case, I think, will be to take those questions in order upon which you are to pronounce your opinion ; and the first is whether the defendants have been guilty of infringing the patent ; and I apprehend that there is no doubt they have, if the patent be a good patent, and if the specification be free from the objections that are raised to it ; and if the specification is to be understood in the sense claimed by the plaintiffs, the invention of heating the air between its leaving the blowing apparatus and its introduction into the furnace, in any way, in any close vessel, which is exposed to the action of heat, there is no doubt that the defendants' machinery is an infringement of that patent, because it is the use of air which is heated much more beneficially, and a great improvement upon what would probably be the machine constructed by looking at the specification alone ; but still it is the application of heated air, heated in one or more vessels between the blowing apparatus and the furnace, and therefore if it should turn out that the patent is good, and the specification is good, though unquestionably what the defendants have done is a great improvement upon what would be the species of machinery or apparatus constructed under this patent, it appears to me that it would be an infringement of it ; therefore your verdict upon that issue

would be for the plaintiff, provided it is for the plaintiff on the other issues. In case it should not be, there may be some little difficulty in disposing of that issue ; possibly that difficulty may not arise. If it becomes necessary, I will give you directions on that part of the case.

The second objection is that the said Neilson was not, at the time of the making the said letters patent, the true and first inventor of any invention for the improved application of air to produce heat in fires, forges and furnaces where bellows and other blowing apparatus are required. Now, upon the evidence in the case, none of the witnesses who have been called on the part of the plaintiff are aware of any invention similar to this ; but there has been an account given by them—by two—of a discovery made by a Mr. Botfield, who is said to have taken out a patent, though we do not know exactly what it was. Botfield's discovery was never carried into effect ; they say it was unlike the present mode of heating air, and according to the account that was given by those gentlemen who are acquainted with Botfield's process, it appears to be different, because the main principle of that discovery, according to their account, was the application of gas and flame to the easier smelting of iron stone in the furnace, and the introduction of hot air was only in addition, and that hot air came over the stove which was introduced into the twire hole, without being kept in an enclosed vessel. (See *Neilson v. Thompson*, above.) And it would appear that Botfield's invention was not the plaintiff's invention ; therefore, that would dispose of the issue that the plaintiff was not the sole inventor, and also dispose of the issue that this invention had been used before. The defendants say in one plea that he was not the inventor, and in another plea they say it was used before ; but there is no evidence of any such use, except in the case of Botfield, which appears to me, if you believe the witnesses, not to apply to the present case ; therefore, probably you will have no difficulty in disposing of the second and third pleas.

But now comes the important plea in the case, as to the specification. And it will be necessary for me to draw your

attention to that specification, and then apply the evidence to it ; and first of all I will say a word upon the subject of the title to the patent, which objection the Attorney-General has taken to-day, and which appears to be included in the objections which have been read, though not very distinctly pointed out in those objections. It is said that the title of the patent renders the patent void, because no one would conclude from that title that the invention was the discovery of a process for introducing hot air into the furnace. The title to the patent is, a patent for the improved application of air to produce heat in fires, forges and furnaces. In my judgment, this question does not arise either for your decision or for mine, if there be any objection upon it ; and I rather apprehend it is an objection on the record, there being no pleas especially directed to the objection of the title to the patent. However, my present opinion certainly is very strong that the title to the patent is not defective ; that it is capable of embracing an alteration by introducing hot air. It will suit either one or the other, and the specification and patent together make it clear what the discovery was ; it was the introduction of hot air by means of heating it before it was introduced into the furnace, between the blowing apparatus and the furnace ; and unless this title had been really meant to be applied to some other discovery quite of a different nature, and afterward by the specification applied to this, it does not appear to me that that generality of the title of the patent would make it void. It is quite different from the case (*King v. Wheeler*, 1 *ante*, p. 317) which has been referred to, where the patent was for preparing malt ; and upon looking at the specification (as anybody would infer from the title that it was malt to be used in the brewing of beer, ale or porter)—upon looking at the specification itself, it was not in truth a preparation of malt for the purpose of brewing, but a preparation of malt for the purpose of coloring ; and therefore entirely distinct from the title of the patent. Upon that ground that patent was held to be void. But in this case the description seems to me to suit the subject which is detailed, to the extent that it is detailed in the specification, and to be applicable

to that ; and there is no evidence in the case to induce you to believe that that was not the plaintiff's real discovery, which he meant to cover by the patent. Therefore it seems to me that, whether this question arises upon the record or whether it is one that can be disposed of by us (I think it arises on the record), that objection, I think, cannot prevail.

We now come to the specification (the learned judge then read the specification). The questions arising upon it are some of them for my decision alone, and some for my decision with your assistance. Now, my impression of the meaning of this specification is that the patentee claims this invention ; he claims the discovery of heating air in any vessel of any size, provided it is a close vessel, and exposed to heat between the blowing apparatus and the furnace. He states the size of the vessel and the form of the vessel to be immaterial. Now, with respect to that clause, I own my strong opinion is that that clause is an incorrect statement, and an untrue one ; and therefore my opinion certainly is, as at present advised, that that being clearly untrue vitiates this specification and prevents the patent from being a good patent. Nevertheless I shall ask your opinion whether, notwithstanding the introduction of that clause into the specification, such persons as would be likely to work under the patent would, by their own judgment and good sense, correct that error in the patent. I am afraid you cannot allow the experience of competent workmen, to which I shall direct your attention afterward, to explain or alter the precise words of the specification or to correct the mistake in it ; therefore, certainly my judgment would be, that that is a defect in the specification which is not cured ; but whether it may be cured or not by the application of science, which is proper to be taken into consideration upon questions of this kind, is a matter which will be disposed of by the court hereafter. My present impression is that it is not ; and therefore that the present specification is invalid. However, it will be necessary for you to pronounce your opinion upon other questions which arise upon the specification, which questions I will put to you.

Now, then, understanding the meaning of this specifica-

tion to be the sense I have given to it, that he claims as his invention a mode of heating the blast between the blowing apparatus and the furnace, in a vessel exposed to the fire and kept to a red heat, or nearly (and which description I think sufficient) of the size of a cubic foot for a smith's forge, or the other size mentioned, or of any shape, these questions will arise for your decision. It is said that, understanding it in that sense, the patent is void, because there are no directions given for any mode of constructing the instrument. But understanding the patent in that sense, it seems to me that if you should be of opinion that a person of competent skill (and I will explain to you what I mean by that) would nevertheless construct such a vessel as would be productive of some useful and beneficial purpose in the working of iron, that the patent nevertheless is good, though no particular form of vessel is given. Then it is to be recollected that this claim is a patent right—a right of heating in any description of vessel ; and in order to maintain that right, it is essential that the heating in any description of vessel, either the common form, the smith's forge, the cupola or the blast furnace, that it should be beneficial in any shape you may choose for all those three purposes. Now, then, I think, therefore, that this is correctly described in the patent ; and if any man of common understanding and ordinary skill and knowledge of the subject, and I should say in this case that the subject is the construction of the blowing apparatus ; such a person as that is the person you would most naturally apply to in order to make an alteration of this kind ; if you are of opinion on the evidence that such a person as that, of ordinary skill and knowledge of the subject (that is, the construction of the old blowing apparatus), would be able to construct, according to the specification alone, such an apparatus as would be an improvement—that is, would be productive practically of some beneficial result, no matter how great, provided it is sufficient to make it worth while (the expense being taken into consideration) to adopt such an apparatus to the ordinary machinery in all cases of forges, cupolas and furnaces where the blast is used ; in

that case I think the specification sufficiently describes the invention, leaving out the other objection (to which I need not any further direct your attention) that there is not merely a defective statement in the specification, unless those conditions were complied with, but there is a wrong statement. But leaving out the wrong statement for the present, and supposing that it was not introduced, then if, in your opinion, such a person as I have described—a man of ordinary and competent skill—would erect a machine which would be beneficial in all those cases, and be worth while to erect; in that case it seems to me that this specification is good, and the patent, so far as relates to this objection, will be good. It is to be a person only of ordinary skill and ordinary knowledge. You are not to ask yourselves the question whether persons of great skill—a first-rate engineer or a second-class engineer, as described by Mr. Farey—whether they would do it; because generally those persons are men of great science and philosophical knowledge, and they would upon a mere hint in the specification probably invent a machine which should answer the purpose extremely well; but that is not the description of persons to whom this specification may be supposed to be addressed—it is supposed to be addressed to a practical workman, who brings the ordinary degree of knowledge and the ordinary degree of capacity to the subject; and if such a person would construct an apparatus that would answer some beneficial purpose, whatever its shape was, according to the terms of this specification, then I think that this specification is good, and the patent may be supported so far as relates to that.

At first sight it would appear that the patentee had supposed that, in order to adapt what would answer in the case of a common forge, and would answer in the case of a cupola, to a larger description of furnace, it was only necessary to increase the size and dimensions of the vessel. It would at first appear to be so, but there are qualifying terms introduced into the specification itself, because it is said they are to be varied according to the blast and the heat necessary to be produced; and then, if you are of

opinion that such a person as I have already described would make an alteration and qualify the patent in such a way, because here there is a qualification in the patent itself, so as to make the vessels applicable to the smelting furnace, as well as they are applicable to a common iron forge or a cupola ; in that case also I think the specification will be good, and you are to say whether you are satisfied that that would be the case upon the evidence which has been adduced in the cause. It will be necessary, therefore, for me to draw your attention to that evidence. I do not propose to read the whole over to you, but the main points of that evidence ; and with reference to the question whether or no you think the specification could have been worked upon to a beneficial effect, so as that a vessel of any size would answer, according to the opinions of some of the gentlemen who have been called, there is no difficulty as to constructing a vessel of a particular shape ; there is no doubt that a man of very little capacity or information on this subject would, according to the terms of the patent alone, construct a vessel—we will say a long box or a tube—there is no great science required to do that according to the terms of the specification ; and if upon the evidence you are of opinion that that would answer a beneficial purpose, so as to make it worth while to introduce that alteration into the blowing apparatus—that is, that the saving in fuel and the advantages to be derived would compensate the additional expense—if that be the case, then there is no doubt that the patent is good so far as it relates to this. You will have to say whether you think upon the evidence that is the fact.

Now, with reference to that part of the case, I may observe that I believe you will find there is no person who has practically tried the cube or the oblong square without some addition to it. It appears that Mr. Neilson, when he was employed, before the specification was taken out, at the Calder Iron Works, supplied them, not with a square box, but with a cylinder ; first of all with partitions, and afterward without, about which I will say a word by and by ; but there is no evidence in the case of any person hav-

ing actually tried a square box, and of a square box actually answering. There is this opinion of a man of science upon the subject—that it would answer ; but there is no evidence that that square box has been tried and has answered ; nevertheless you may be so well satisfied with the opinion of these men of science as to entertain no doubt that it would answer. There was, it appears by Mr. Russell's evidence, at Wednesbury, something that looked like a square box ; but upon looking at that there were other conditions ; it was not a square, but a square with a hole in the centre of it to admit the flame, so that it did not exactly answer the description of a square box, and a larger surface was exposed to the flame there than would have been in the square box or oblong square. You will say whether you are satisfied of that. The square box seems to be the most simple, and seems to be also the most objectionable form that could be used ; for one gentleman has said that no person would think of introducing it—perhaps it might require some science to discover that ; but supposing you are of opinion that a square box would answer a beneficial purpose, and that it was a description of apparatus which could be made pursuant to this general description of evidence, and would really answer, then I think there can be no doubt that the specification would be good.

Before, however, I draw your attention to what the witnesses have spoken in detail, as to the mode of operating under the specification, it may be as well that I should call your attention to one other objection which is raised ; and that is with respect to a question which arises from an answer given by one of the first gentlemen who were called, who gave it as his opinion that in order to adapt the hot-air-blast process to the furnace, it was necessary to introduce a different description of twire. You will find that some of the witnesses gave it as their opinion, in the early part of the case, that this apparatus could not be usefully employed unless there was an alteration of the common twire, and some other was substituted. It appears that in the ordinary mode of supplying the furnace with the cold blast, these twires, being metallic cases of the holes in

which the pipes are introduced to supply the blast, are by the great action of the heat burned or melted, and it becomes frequently necessary to renew them. But it is agreed on all hands that the introducing hot air, especially at a temperature of 600 degrees, at a place where the heat is very great, would have a great tendency to melt those twires much more than if the hot air was not continually going through them ; and according to the opinion of two of the gentlemen who were called on the part of the plaintiffs, they say that the process could not be beneficially employed unless there was either a water twire in which the water circulates and is constantly kept cool by the circulation, or some other equivalent protection for the entry of the pipe into the furnace. Now, if that should be your opinion, another objection to the specification is open—it omits to make all mention of water twires or other protection ; for if this apparatus would not be beneficial without them, then in that case it is of no use to the public as it is described in the specification, and the specification would be bad. That, I think, would be clear. Then the question of fact arises, whether you are satisfied upon the evidence of those gentlemen, one of them a practical gentleman ; and I call your attention to what has been spoken by Mr. Penrice, who says that in point of fact they did use at the Calder Iron Works twires of the ordinary description, dry twires, and that they continued to use them for two years, and also continued to use this process beneficially. Therefore that is evidence to be set off against the other. Whether they could use the process in the simplest form beneficially is left in matter of doubt ; but unless they could use the process in the simplest form in which a man would make this according to the specification, it appears to me that the objection as to the twires is also a good objection to it, because then that ought to have been introduced, and it is not beneficial unless it is introduced. Therefore it is not a good subject of patent unless those twires are added to the apparatus as described in this specification ; and on that ground it would appear to me that the specification was defective. Then you will have the goodness to attend to

that evidence ; and if you come to the conclusion that without the water twires, though more beneficial with them, there still would have been an apparatus which would work beneficially and be worth while to set up, the objection founded on the water twires vanishes.

Now, with respect to the evidence : Mr. Russell (the first witness) says that, looking at the generality of the specification and the complicated form of the arrangements in such a case (*semble*, present improved state), a workman would not be able, directed and instructed by the specification alone, to complete such an apparatus as would be most efficaciously used. That, however, is not the exact point. The point is whether it can be used beneficially, taking it in the simplest form. If, in order to use it beneficially at all, experiments were necessary, about which a good deal was said by the Attorney-General, then the specification would be void. If it were necessary to use experiments in order to have the benefit of the invention in which it is claimed by the specification, in that case it would be void ; but if in this case it is only necessary to have recourse to experiments in order to have the full benefit that the subject is capable of, it appears to me that it would not void the patent, because, though it is a subject beneficial in its simplest form of application, it is a vast deal more useful when the improvement takes place ; and in order to make the greatest improvement, unquestionably many experiments are necessary ; and even at this very moment, notwithstanding the great improvements that have taken place, there is no doubt that the matter is not in that state of improvement which in all probability it will be in the course of a few years. It does not appear to me, therefore, that what the Attorney-General has dwelt upon with reference to the evidence, all the evidence in the case, that that affects the patent. If experiments were necessary to produce any degree of benefit under the patent, then in that case I think the specification is void, for it does not give the requisite degree of temperature ; but if the simplest form would be productive of benefit, it appears to me that the specification is good.

Mr. Jessop, who has been for forty years in the iron trade, describes the cold blast, and the impression he was under, that inasmuch as the works operated better in winter than in summer, it was a good thing to have the pipe conveying the cold blast protected from heat by means of being enclosed ; and the next witness, also practically well acquainted with the subject, was of the same opinion, and painted white a portion of the regulator in order that the air might come in a cool state. This turned out to be a perfect mistake, as subsequent experience has shown, and that the cold has nothing to do with it ; that it was only from the dryness of the atmosphere ; but there is no question about the hot blast being a great improvement. Mr. Jessop describes the saving consequent on the adoption of the hot blast, and says, " I have read the specification, and I do not think that any one practically acquainted with the subject would have the least difficulty in constructing the apparatus." Now, this is the opinion of a gentleman well acquainted with both the principle and the practice : " We used the water twires with the cold blast, and I heard of it in other places ; we used it occasionally when the blast did not enter the furnace properly ; when the heat was of a nature to injure it, we used it with the hot blast regularly. It is possible to use it without, the effect being that the twire would be soon destroyed, and it increases the expense." But, on cross-examination, he says it is possible to do without the twire, but not without some substitute. " I think we could not use the hot blast without either the water twire or some other protection different from that which was used in the cold blast." If that is right, the specification is defective ; but whether it is right or not you are to decide. " I have not tried myself experiments at any temperature below 200 degrees Fahrenheit to ascertain whether it is worth the expense ; but if a less degree of heat is required, there would be less fuel, and any degree of heat would make it worth while to adopt the alteration, therefore any description of vessel will produce some degree of heat." Then he describes what the water twires are. " I believe they have always been used in refineries. I

have known them some years ; but not the same sort of water twire has been used. There was water at the sides and the top on those, but not at the bottom. We employ improved twires in our refineries. We never used the water twire for the hot blast. For the cold blast we used the water twire. The sides of the furnace began to burn, then we applied the water twire. Sometimes a twire would last only a night, sometimes it would last for six months. It would not be prudent, but it is not impossible to do with the common twire when the furnace is hot. If the supply of water were cut off and the twire melted, then the inconvenience would be that the works would stop for two or three hours—that is, the blast would not go on. Of course the iron ore would be made in the furnace. The blast would not go on for two or three hours, until that was repaired." That is an inconvenience which he thinks would prevent the adoption of the hot-air process. "Even water twires," he says, "would sometimes melt ; with the cold blast we did not use it." Then the question is, "Is it not indispensable to have the twires when you use the hot blast ?" The answer is, "I do not know that it is indispensable, but it is desirable." He has not yet come to his final answer. "I think we could carry on our works beneficially without the water twire, but not so beneficially as with it. I think we could use the hot blast profitably without the water twire, but we should use fire-clay. I think that we could not beneficially use the hot blast without the water twire, or some other protection different from that which we use in the cold blast." He speaks of the Low Moor Works having gone on for a time ; that they used the hot blast, and afterward discontinued it. Then he had a retort plan ; in fact, a tubular form. He is asked, "If you have a vessel with a sufficient heating surface, and bring the heat in contact with it, it will answer with a vessel of any shape ? A box would not answer so well, because there is a large interior space which you do not bring in contact. You may accomplish the object by having the interior vessel or interior plates." Then he says, upon re-examination, "Any one who knows the process of smelting would know

that if heat were increased you must have recourse to some method of guarding the pipe ; and he would naturally have recourse to a water twire, which was well known before." Now, I asked him that question ultimately ; because no doubt this will be put in a different shape hereafter, to take the opinion of the court upon, whether that circumstance would cure this omission in the patent.

Mr. Musheatt says, "I have been connected with iron works since 1792. I always used the cold blast, and never until this patent heard of the hot blast ; there is no iron-master who would not, with his workmen, arrange an apparatus for heating the air sufficiently, so as to produce a beneficial effect in the blast furnace. The water twires were sometimes used with the cold blast. It has been known for forty years that if in the aperture the twires melted the water twires would relieve that." He says that one effect produced has been the manufacture of iron from ore which would not produce it before. He speaks also with respect to Botfield's patent, and he says that does not in the slightest degree represent the present invention. Then he says, "There is a feeling on the part of the iron trade that the friction of the air in passing through is a bad thing. An iron-master would not use a vessel of this sort which produced friction. The advantages of heating the air are counterbalanced by the friction." It appeared afterward, from Mr. Farey's evidence, that there are two things to be attended to—the current of air, and also the heat, one being rather contrary to the other ; and experience alone, and probably experiment, would ascertain what was the best. He says, "I have never seen any apparatus except in a tubular form ; I never saw it in the shape of a square ; and I never saw it in the shape of a box." He says, "In my opinion a workman would form a straight vessel ; that is from the prejudice he has to the tortuous form for the passage of air." He says, "I should have tried that which produced the greatest heat on the surface. I might have tried a cylinder, or long box, with a blowing apparatus, without anything to direct the current of the air in the first instance. I should have made experi-

ments in the first instance. I should at first make it ten or fifteen feet long." I have told you that if experiments are necessary in order to construct a machine to produce some beneficial effect, no doubt this specification is defective. If experiments are only necessary in order to produce the greatest beneficial effect, in that case, I think, the patent is not void. "I should at first make it ten or fifteen feet long. The air would have been heated there, and carried into the blast furnace. It would have succeeded to a certain extent, which would give me grounds for persevering. I should have gone on with my experiments if I had grounds for proceeding with my experiments." He says, "I have never tried the experiment, but I have no doubt the advantage arising from a heating vessel ten or fifteen feet long, supposing there was no further improvement, would have counterbalanced the expense of setting it up." He is of opinion that in the simplest form that would suggest itself to any one there would be a beneficial result. "I have never seen the process so conducted. The next experiment would be to lay another horizontal pipe next to that. The next thing to try would be a communication pipe. I have heard the term condy pipe, but can attach no meaning to it. I should have come to the result of using pipes from the specification alone, with experiments, in perhaps five or six months, if I had gone on with vigor and perseverance. The quality," he says, "may be deteriorated from overcharging the furnace. Hot-blast iron is sold at an inferior price." He says, "It is compensated on the whole by the greater production from ores which were stubborn before, and upon the whole the iron is improved; and looking at the specification, and seeing what is there mentioned as to ten thousand cubic inches being required for the cast-iron form of cupola, and applying it to a smelting furnace, I should have increased, not the dimensions, but I should have increased the heating surface particularly; I should not have increased the dimensions solely. I do not know exactly the shape, but I should have tried to have got the greatest heating surface possible." That is looking at the specification. He says there is no reference to the heating

surface in the specification. The vessel may be of any form, provided it contains ten thousand cubic inches. It speaks of capacity, not form ; it leaves the form, as to the heating the surface, to the convenience of the manufacturer.

Mr. Penrice, a mining engineer, was in the employ of the Calder Company, and superintended the apparatus used in 1826. The cold blast was then used ; he had never heard of the hot blast, and he believes it was first used in January, 1829. He describes that it was first used with a malleable iron vessel, seven feet long and thirty-six inches diameter, being a cylinder, that was interposed between the blowing apparatus and the furnace with internal partitions. That was enclosed in brick-work. There was only one of them at first, and then there was another introduced, which had not these partitions in it. Now, if you should think the patentee knew that these partitions were useful and omitted to state that in this specification, that would make the specification void. You will consider whether that was so. He does not seem to be fully aware of the nature of his own invention, for he tried another cylinder without any of these partitions in it, seeming to think that no advantage was derived from those partitions, because he sent another cylinder to the place without any partitions in it at all. It is plain which of the two would be most likely to answer, but that does not appear, I think, on the evidence. And, of course, if the introduction of these were necessary to make the square box or the round box operate beneficially, in that case also the patent would be void, because that is not introduced as a necessary circumstance into the specification. Then he says with respect to the twires, "At first we had dry twires, and we continued to manage with them for two or three years. Then we got the water twires afterward." Therefore, according to his account, they used two cylinders, not a very improved apparatus, but a tolerably simple one. They succeeded in producing, if you believe him, a very great degree of heat, probably at least 400 degrees ; and also they contrived to get on with dry twires, without introducing water twires at all, or any other substitute for ordinary dry twires, more capable of resisting

the heat than they are. If you believe that evidence, and place entire reliance upon it, it would show that the omission of introducing twires into the specification was a circumstance that was not material to the validity of the patent. "They used this method," he says, "without intermission in 1837, when I left." He says, "I have read the specification. I think that no one acquainted with the making of iron would have any difficulty in constructing an apparatus from it." Then he says, "Mr. Neilson sent a man and a plan. The first apparatus was erected with the assistance of the man. The vessel which was put up was a cylinder made of malleable iron, thirty-four feet in its cubical contents. It was heated by a fire under it. The flame passed round it. It was enclosed in brick-work. It had four half partitions in it to drive the air against the sides. The partitions were connected with the outside, the object being to retard it and drive it on the sides. That box was sent from Glasgow. We then put up a second machine in two or three days; I cannot say whether it was part of the original plan or whether it was sent for to Glasgow." Probably it was a part of the original plan, because it was sent in two or three days; he could not tell, however, how long such an instrument would be in constructing. He says, "The second plan was a cylinder, made bottle-necked at the end, without partitions." So far as we learn from this evidence, it appears pretty clearly that he was not acquainted by any means with the full benefit of his invention. If he had known that the tubular form would answer best, he ought to have introduced it, and the specification would have been bad, upon the ground that he concealed the best mode of working out his own discovery. However, I think one may very well collect from the evidence as to Mr. Neilson's own acts, that he really was not fully aware either of the great value of his patent, and still more, was not fully aware of the most beneficial mode of carrying it into effect. That was discovered by persons more acquainted than he himself was with the science of heating air. Still, however, I think, if you are of opinion that the specification does disclose such an apparatus as to

enable an ordinary workman acquainted with the subject of making blowing apparatus and fitting up apparatus for forges to construct an apparatus of some value, so as to make it worth while, it seems to me, that so far as this objection goes, the specification would not be insufficient. He says, "The next was a serpentine pipe, twelve feet long, nine and a half feet in a straight line." I need not go through the various variations that took place afterward in the progress of the improvements. Ultimately they got to small tubes, then there was some gridiron pipe used in 1832, and the tubular form was adopted; and there can be no question that that was the most beneficial form as far as experience goes to this time. He says, "We found the old dry twires answer to a certain extent. Sometimes they lasted a week or more, or a few days; sometimes a few hours." He says, "They were removed oftener than with the cold blast. It frequently happened that they lasted only a few hours. They were changed oftener than once a week, sometimes two or three times a week. They were not changed in the furnace; not once a day. I should say there might be one a day in both furnaces. Sometimes the blast stopped for a quarter of an hour, sometimes half an hour or an hour. It generally takes two or three people to do it. In some cases two twires have been put in in one day. I cannot say it has not happened that four or five twires have not been put in in one day. Before I went there, I had no experience in smelting iron. I was the underground surveyor and made the plans for the works, and had free access to the works and the books. I made myself well acquainted with what was going on so as to be enabled to say that it was worked to a profit. In 1831," he says, "a range of horizontal pipes were introduced; there was a continual flow of air from the pipes; that raised the temperature to as great a degree of heat as ever has been acquired since." He says, "We used a variety of forms of vessels in different furnaces at the same time."

Mr. Farey says, "I have investigated the subject of iron-smelting. I have known the mode in which iron is smelted for thirty or forty years. Cold blast was used for smelting

iron before the hot blast was employed. It is a new invention of Mr. Neilson's, and contrary to the opinion which was universally entertained, that the colder the air the better. The heat was considered as inimical. I consider this as an invention of very great magnitude indeed, applicable to all smelting operations where the blast is used. It will soon," he says, "in all probability, be used as a substitution for reverberating furnaces." He says, "A person acquainted with a blowing apparatus as it existed before the discovery and as it exists still would have no difficulty in constructing an apparatus for the improved application of air to a beneficial extent—I mean, accustomed to the construction of blowing machinery. Those are of a high class, and have all the requisite knowledge for adopting this improvement." Now, what he goes on to state afterward seems to render it doubtful whether an ordinary person would be able to do it; but if the simplest form would be a benefit, one should not feel much difficulty in saying that he would be able to work out a beneficial apparatus from this specification. "I am acquainted," he says, "with the mode of constructing vessels for heating air. The object is to get the largest surface exposed to the fire. There are two qualifications; the first is, that there should be a sufficient passage in the vessel, so as to allow the current of air to pass without obstruction; and the other is, that the air in its passage shall be compelled to pass in contact with the heated surface; and with these two conditions the form and shape are immaterial." That part will be material for you to attend to. [Follett, on the part of the plaintiffs, called the learned judge's attention to the notice of objections, and contended that the supposed misstatement contained in the words "the form or shape of the vessel is immaterial to the effect," was not pointed out in the notice of objections. But the learned judge being of opinion, though not specifically pointed out, it was included in the general words of the notice "that the specification is calculated to deceive," leave was given to move upon that point.] "The size depends upon the quantity of blast required, and the temperature to which it is heated. These

principles were well known at the date of the patent. I knew of water twires in 1809." Then he describes the three descriptions of water twires which have been used and are now used. And on cross-examination, in order to ascertain what he meant by a high class of engineers, he said, "He considered Watt and all manufacturers of steam-engines and blowing engines of the first class." He says, "They have very scientific men in their employ. I think an engineer of the second class would construct an apparatus which would be beneficial ; but not to the extent to which it has now reached or would reach in the hands of that class exclusively employed in making blowing apparatus." He says, "The third class are iron-masters, making their own apparatus ; they would do it," he says, "beneficially ; not so good as the second, and not near so good as the first. An ordinary workman would not be employed by an engineer of the first or third class. A man must bring the ordinary information which is current among those who are employed to design and construct blowing apparatus. One of the points is to provide an adequate passage for the air. The rules and proportions for such passages are well known and habitually practised ; he must also possess and exercise that knowledge in the application of fire to heat boilers, which is equally well known and habitually practised in the making of steam-engines. He must also pay attention to the circumstance that the contact of the air must be kept pretty constant to the surface of the vessel, and upon that subject the specification contains very useful information, stating the capacity for a common cupola." Then there is a question as to the rules and proportions. "The passage of the pipe to contain the air should not be less than one sixteenth of the blowing piston, or one fourth of the diameter ; he may make it larger if he pleases—that is the ordinary rule for blowing apparatus, so that the air would pass sixteen times as fast as the piston travels. If the passages are made larger, it goes slower, with less obstruction. There is no objection to make it larger ; but it ought not to be smaller ; that is all I have to say as to the passage of air." Then he says, "It might be made so large that the

heating of air would not take place. As to the steam vessel, the great object is to distribute the heat all over the surface, so that it would not be too vehement in a particular part and destroy the boiler. The object ought to be that the heat should be retained in contact with the boiler so long that there is no extravagant waste of heat passing up the chimney." That is speaking of the steam apparatus. These are the two points to be accomplished. He says, "An engineer of the third class would not be so competent by reason of want of science and the inferior work which they copy. An engineer of the third class would have no difficulty if the thing was described to him ; he would be in a situation of having a copy to go by, and without that he thinks that he still could make an apparatus which would be useful." He says, "Assuming the size to be given, the form and shape are immaterial, provided you attend to the two conditions." It was a long while before we could get him to state the exact fact as to that. This question was put to him : "Supposing ten thousand cubic inches are required, is it immaterial whether it is a tube, a globe, a cylinder, a pipe or an elongated cylinder ?" He says, "No ; it is very material—the variance of the shape is very material, unless my conditions are attended to, the conditions under which the air is to be supplied." This specification says that the shape is immaterial to the effect, whereas all the effect depends upon the shape of the vessel ; and unless that can be controlled by the admission of the evidence of a person acquainted with the subject, and that evidence is to you satisfactory, I am afraid, according to my present opinion (it may be possibly wrong), that the patent has failed.

Mr. Holdsworth, an iron-master, says, "A person acquainted with the mode of constructing a blowing apparatus would have no difficulty in constructing a proper apparatus from the specification. We have only three furnaces in operation. We have at several times varied the form. The new plan is to make the pipes longer, with an oven over them, so as to make the temperature more uniform." He says, "I read the specification to see whether

it was a good patent. I am a cotton-spinner, a machine-maker, and an iron-founder. The box or cylinder would no doubt heat the air to a certain temperature—what temperature I cannot say. I differ with Mr. Farey as to some parts of his evidence. I consider that any form of vessel would heat the air. I think it might be heated in a cubical box without partitions in it quite easily. Any one would try the simplest and easiest plan to see how it would answer." That would be experiment; and if experiment were necessary in order to make it answer in all the three cases, then it would not be a good specification. If experiments were necessary, and a man could not do it with the means and knowledge which he possessed, and it were necessary to make experiments in order that the plan should answer in all the three cases, if that were the case, the patent would be void upon the substantial ground. "I agree that to a great heat the shape is material, but to heat the air it is immaterial. The form and shape are immaterial in this, that any vessel will produce a result; the form and shape are material as to the extent of the beneficial result. The last shape is the horse-shoe form, which gives 600 degrees. The last improvement is increasing the heated surface in proportion to the air to be heated."

Then Mr. Kirkman, an engineer, says, "I had the specification put into my hands. I was requested to make experiments, so as to speak to it. I prepared no apparatus. Finding two gas retorts about the works, I put them up. They were thirteen inches and a half in diameter, and in length four feet nine inches, and the contents were 18,000 cubic inches. I found upon an experiment it was beneficial to this extent, that with cold air we required 298 lbs. of coke to melt a ton of iron, and that with this apparatus and the hot blast I found it was reduced to 113 lbs., which is a saving of one half in the fuel." He says, "I required no other directions than those in the specification, added to my own practical knowledge. I employed one cylinder, which we worked up to 315 and 480 degrees. There was a very considerable saving. Any person accustomed to manufacture apparatus of this kind would find no difficulty."

Then Professor Daniel says, "I am acquainted with the specification. I never knew of the hot blast before. A person accustomed to the manufacture of blowing apparatus would be able to make a beneficial apparatus according to the specification, and most clearly a person accustomed to the process of heating air, and better acquainted with the principle and nature of the invention, would construct a beneficial apparatus. The principle is entirely new; I never saw the process in actual operation. The shape depends upon circumstances—the situation, the heat required, and the power of the blowing apparatus."

Mr. Cooper says, "Looking at the specification, there would be no difficulty in heating the air to a certain extent, so as to use it beneficially, but there would be some difficulty as to obtaining the best mode. I do not believe that has yet been done." And he thinks it probable that improvements will take place to heat the air to a still higher degree of temperature. Upon cross-examination he says, "To some extent one form of vessel would be better than another, but everybody could get some beneficial result so as to make it worth while to employ it."

That, gentlemen, is the evidence, and will you have the goodness to answer me the questions in the form in which I put them?

The jury found as follows:

1. We all agree that shape and form are material to the effect simply—that is, to the extent of beneficial effect produced, not to producing some effect, for some beneficial result would be produced from any shape, and as to producing the extent of beneficial effect, the form and shape are material.

2. We think a man of common understanding, of ordinary skill and knowledge of the subject—that is, of the construction of the old blowing apparatus, would be enabled to construct, according to the specification alone, looking at it altogether, such an apparatus as would be an improvement; that is, would be productive of some beneficial result, sufficient to make it worth while, expense being taken into

consideration, to adapt it to the ordinary machinery in all cases of forges, cupolas and furnaces where the blast is used.

3. We think a person of competent understanding, and ordinary skill and knowledge of the subject of the construction of the air-heating process, would be enabled to construct, according to the specification alone, in the same way, looking at it altogether, such an apparatus as would be an improvement ; that is, would be productive of some beneficial result, sufficient to make it worth while, expense being taken into consideration, to adapt it to the ordinary machinery in all cases of forges, cupolas and furnaces where the blast is used.

4. We think a person of common understanding, and ordinary skill and knowledge of the air-heating process, would not be misled by the description of the immateriality of the form and size of the vessel in producing the effect.

5. No person, we think, nor a person of common understanding, and ordinary skill and knowledge of the blowing process, *a fortiori*, would be misled.

PARKE, B., then directed the verdict to be entered on the issues as follows : On the first, second and third for the plaintiffs ; on the fourth for the defendants, upon the construction of the specification, with liberty to move, thinking that, according to the grammatical construction of it, there was an averment that the form and shape were immaterial to the extent of the effect—that it was a misdirection ; that there being a misdirection in the instrument itself, it could not be corrected by parol evidence, with liberty to move to enter that verdict for the plaintiffs on that issue ; and for the defendants to take the objection in answer contingently, that the patent is void for the bad title if it be open upon the issue, in answer to that application, and to move in arrest of judgment if the verdict is entered for the plaintiffs.

The proceedings on motion for a new trial are reported below.

NEILSON v. HARFORD.

Exchequer, June 9, 1841.

(1 Web. P. C. 328.)

Requisites of Notice of Objections to Specification. Mistake in Specification. Construction. Questions of Law and Fact.

An improvement may constitute an infringement.

A statement in the notice of objections, that the specification is calculated to deceive, is sufficient to let in evidence as to any particular passage being false.

Where the objection simply states the specification to be insufficient, if the plaintiff is contented to take that as notice, any objection may be made at the trial to show that the specification is insufficient.

If the objections are not sufficiently specific, the plaintiff's course is to apply to a judge for an order for the delivery of a more specific notice.

As a rule, the objection must be more specific than the plea; but if latter sets out the objection in full, an objection in similar terms is sufficient.

Though the title of the patent be ambiguous, if it is explained by the specification, and is not at variance with it, it may be sufficient.

The patentee is bound to disclose in his specification the most beneficial mode with which he is acquainted.

A principle, to be the subject of a patent, must be embodied.

A patent is not vitiated by a mistake in the specification, as where air is called an imponderable substance, or sulphur a mineral; nor by a mistake in a matter foreign to the invention, which cannot mislead; nor by the inaccurate use of words which are explained by the context.

The construction of the specification is for the court, the meaning of the words and surrounding circumstances having been ascertained by the jury.

Motion to enter verdict for the plaintiff, or for a new trial.

The proceedings at the trial are reported in the preceding case.

Follett, for the plaintiffs. I move to enter a verdict for the plaintiffs in pursuance of leave reserved, or, in case it should be supposed that there was any matter not submitted to the jury in the alternative, for a new trial. There were five pleas, four of which were found for the plaintiffs, and the other, as I submit, was also found for the plaintiffs; but the learned judge directed that the verdict should be entered for the defendants on that issue, with liberty to the plaintiffs to move to enter a verdict for them. I submit

that this is emphatically and exclusively a question for the jury ; that it was not a question of law, but of fact, and the jury have distinctly found that the plaintiffs did describe the invention and did point the mode of its use.

The patent was substantially for a mode of heating the air between the blowing apparatus and the furnace in a closed vessel. It was contended, therefore, that every mode of heating the air in a closed vessel between the blowing power and the blast furnace was an infringement of the patent, and the learned judge was of that opinion, and no question arises upon that now. The defendants in this case use a vessel consisting of various pipes, and since the patent was taken out it has been discovered, by various experiments and improvements, that the higher the air is heated the more beneficial its effects on the furnace. That does not seem to have been in the contemplation of the inventor ; in the pipes used by the defendants there was greater surface exposed to the fire ; it was more economical of fuel, and that vessel consequently produced a higher temperature than vessels of a different kind. The learned judge was clearly of the opinion that it was an infringement—[PARKE, B. That it was an improvement, but an infringement]—so long as the patent remained in force.

The question now turns mainly on the fact whether or not the jury did not find the fourth issue in favor of the plaintiffs—and two points were made. The objections to be delivered under the statute (5 and 6 Will. IV., c. 83) must distinctly point the attention of the plaintiffs to the precise nature of the objection to be raised. The objection raised was not open to the defendants. The construction put on the plea was not a right construction ; but the question is not open because it was for the jury. The finding of the jury that upon the specification alone a person of ordinary skill would construct the apparatus required, disposed of every other question. [PARKE, B. My doubt was whether the evidence of a person of ordinary skill would do, or could be allowed to contradict the grammatical construction of one part of the specification.] The learned judge considered it unnecessary to leave to the jury whether

the particular passage, that the form or shape of the vessel or receptacle was immaterial to the effect, was inaccurate, but he left it to the jury whether it was calculated to mislead, and they found that it was not. The learned judge took that sentence alone from the rest of the specification and stated his opinion to the jury that, in point of law, that was a misstatement, and that it would affect the patent. [PARKE, B. Provided it was untrue in fact.] We have had no opportunity of presenting what has been the impression produced on other minds as to the meaning of the passage. This is not a patent taken out for heating air ; that was perfectly well known ; and everybody knew that for the purpose of increasing the temperature the larger the surface that was extended to the fire the greater the effect which would be produced on the air within it. The passage does not profess to say that the form and shape of the vessel for heating air is not material as regards the air in those vessels, but that was the construction adopted by the learned judge ; and it was in that view that he put it to the jury. I submit that is not the meaning of the passage at all, but that the meaning of the passage is this—I do not make any claim for vessels for heating air. Everybody knows how to heat air, and everybody knows the principle of it. There are various vessels for heating air, of different forms and different shapes, now in use ; I say that, as regards the effect on my furnace, the form or shape is immaterial, and may be adapted to local circumstances ; and so it is entirely immaterial. It is not immaterial to the heat of the air ; and if, upon subsequent discovery, you have found out that by raising the temperature to a higher degree you may improve upon the patent, that is another question ; but this patent was never taken out for heating the air, nor has it any reference to the form or shape of the vessel for heating. It is, that when you have heated the air, and heated it for the purpose of raising a stream proper to convey it into the furnace, then the form and shape of the vessel is immaterial as far as regards the working of the blast furnace.

The question as to this passage is for the jury, not for the

court ; the specification is not one of those written instruments which it is the province of the court to decide on. It is stated that the specification did not sufficiently describe the manner of carrying the invention into practice. The jury have found that the passage could not mislead, that the specification alone is sufficient, and that any person, upon the specification alone, might carry the patent into effect. The verdict should be entered for the plaintiffs, unless the court are to lay down that it is not a question for the jury at all, but for the court, and that the court have a right to say, upon our construction of it, that this is calculated to mislead. But this is matter of evidence ; it is not for the court to construe a written instrument independent of parol evidence. I am not speaking of defects in the title, or of the patent claiming more than it ought to do ; but of the intelligibility, to use Lord Eldon's words, when he says that every question of that sort is for the jury —the intelligibility of the specification, and the way in which the work is to be constructed, and whether ordinary persons would or not understand it (*Hill v. Thompson*, 1 *ante*, p. 299).

Rule granted.

Campbell, Attorney-General. I move for a rule to show cause why there ought not to be a new trial on account of the finding of the jury, as being not only without evidence, but entirely contrary to the evidence adduced. The plaintiffs' patent is for three things : for the smith's forge, the melting cupola and the larger furnace for smelting iron. No evidence is given as to how the invention is to be applied to either of the two first, and the matter is discussed as if the plaintiff had made a great discovery of how iron was to be smelted in a superior manner by means of a hot blast. The only mode in which the patent can be worked to advantage is when the air is heated in a long succession of tubes ; but Mr. Neilson was so ignorant of the manner in which his invention was to be used that at first he tried a vessel of a cylindrical form, seven feet long, with partitions, for the purpose of obstructing the rapid passage of the air.

The passage in the specification as to increasing the dimensions of the air vessel is an entire misrepresentation. No bad faith or concealment is imputed to the plaintiff; he states that which is untrue from ignorance. Another objection is open to us in showing cause or in arrest of judgment—that the specification does not at all follow up the title of the patent.

Rule granted.

Campbell, Attorney-General (Pollock, Monteith and Hill with him). My learned friend, Sir W. Follett, has obtained a rule to show cause why the verdict entered for the defendants upon the fourth issue should not be entered for the plaintiffs, raising the question upon the answers returned by the jury to the five questions submitted to them upon that fourth issue. In point of law the verdict ought to be for the plaintiffs or for the defendants; those five findings all respect the fourth issue—the fourth being “that there was not a sufficient specification.” The specification is directed to three things—to common furnaces, smelting cupolas and blast furnaces—and may be sufficient with regard to common fires or furnaces and to cupolas; but if it is not sufficient with regard to blast furnaces, the patent is void.

It is first objected that we have not complied with section 5 of 5 and 6 Will. IV., c. 83, and that we are not entitled to make the objection on which we rely. That act was framed with a view to the former mode of pleading in such an action, according to which the defendant was at liberty to give everything in evidence. He might say that it was not new, that it was not useful, that there had been no infraction, that the specification was defective. That was a great hardship on patentees, for they did not know exactly what objections to be prepared to meet. To remedy this the fifth section of the act was passed. Now, I admit that it has been held by the Court of Common Pleas that upon an application before trial the court or judge has power to order a particular of the objections, which shall be more specific than the plea—it shall not be a mere echo of the

plea ; but the question is not now what might have been done if there had been any application as to the reforming or amending the particular of objections, but you are now considering the effect of the objections of which notice was given, no objection having been made to them, and whether the whole is not clearly open to us. The result of the decision in *Bulnois v. Mackenzie* (2 *ante*, p. 480), where the objections were a mere echo of the pleas, is that the court, under their general jurisdiction, have a right, if they think fit, to order the notice to be more specific before trial, in analogy to what is done with regard to particulars of the causes of action, which the plaintiff means to give in evidence at the trial ; or where there is a notice of set-off, or a plea of set-off, a particular of the grounds on which that plea or notice of set-off may be substantiated at the trial.

The result of the decision in *Fisher v. Dewick* (2 *ante*, p. 490) is, that the court had jurisdiction to order a particular that should disclose more than was to be gathered merely from the pleas. But no case has occurred when, after trial or at the trial, the objection arose that the notice was insufficient, and I apprehend that if the defendant gives us notice of objections in which he simply stated that he objected to the specification, that would enable him to make any objection to the specification at the trial, the plaintiff being contented with that, and not applying to the judge or the court for a better particular of the objection. [Lord ABINGER, C. B. You say the notice was large enough to embrace the objection made at the trial, and that if it did not comprehend that, if anything more specific was required, they should have applied for it before the trial.] [ALDERSON, B. The question at the trial is only whether the words of the notice are sufficiently large to include the objection.] Yes ; if they had wished to know in what respects we said the specification was void ; then I do not dispute your lordships' authority to have ordered us to state in what respect, and then we might have gone to the dimensions, to the shape of the vessel, and so on. [ROLFE, B. The statute is very strangely worded. If you prove the ob-

jections in the notice, the language of the statute would go to show that you may prove any others beside.] [ALDERSON, B. Suppose it was simply, the specification is insufficient. If the plaintiff is contented to take that as notice, surely any objection may be made at the trial to show that the specification is insufficient.] The title is "improved application of air to produce heat in fires, forges and furnaces where bellows or other blowing apparatus are required." Well, then, it is merely an improved application of air to produce heat. It is not the heated air. [Lord ABINGER, C. B. It might just as well be air rendered colder.] Yes; because if the vulgar notion had turned out to be true, "that the colder the air the better," then this might have been a refrigerating apparatus, if it may be for a heating apparatus; and I submit that one objection which is open to me, and which was reserved at the trial, is, that under a title "improved application of air," etc., he cannot specify an invention which is entirely confined to the temperature of the air when it is to be applied. Such of your lordships as have served the office of law officer to the Crown must be fully aware of the constant attempts that are made by those who apply for patents to produce a title that may entirely mislead—that may give not the remotest notion of what they intend, and which may enable them for six months, or whatever period it may be, to gather together whatever they can collect, and to specify it at the end of that period. Great frauds have been committed on that subject; and it would be a most salutary decision, and most wholesome and beneficial, if your lordships were to lay down a rule that the title of a patent should at least convey some idea of the invention for which the patent is supposed to be granted. Until there is a judicial decision on that subject, I am afraid that all the efforts that may be made to resist these attempts will be entirely ineffectual. [Lord ABINGER, C. B. I am afraid it is too late to agitate that. If the specification is consistent with the title, that would be sufficient. I have known persons who had great difficulty in finding a name for their patent invention. I knew a very useful invention set aside because an ingenious

person at the bar had suggested to a gentleman to take as a title to his patent "a tapering brush;" it did not taper; it expanded] (*Rex v. Metcalfe*, 1 *ante*, p. 297). I never would suggest that it should be necessary at all to disclose the mode in which the invention is to be carried into effect. For if you required that the title of the patent, which immediately becomes public, should at all disclose the invention, fraudulent persons who have patents in progress would specify those inventions; but still that there should be some general notion given of that for which a patent is sought would be most salutary and highly desirable. [PARKE, B. It would be for the Crown to adopt that by requiring the specification to be enrolled within a less time than six months.] I may mention that to guard against that the practice now generally adopted is to require that there shall be *de bene esse* a specification lodged with the Attorney and Solicitor-General, which certainly guards against frauds that might otherwise be practised to a certain degree. [ALDERSON, B. You interpret the word "air" as air in its natural state, and the application is merely the mode in which it is brought to the furnace. This title would apply to a tube coming perpendicularly down on the furnace, or a tube coming perpendicularly up.] Any change in the blowing apparatus. It certainly tends to mislead; because, suppose that a person had a patent for a blowing apparatus, he would suppose that this might be an infringement upon that patent, and I dare say there were attendances before the law officer of the Crown by persons who had a blowing apparatus, for which a patent was granted, or who had it in contemplation to solicit a patent for a blowing apparatus. But this excludes the notion of its being at all a mode of cooking the air, of dealing with the air before it is applied; it is not a dealing with the air, but it is the application of the air. [Lord ABINGER, C. B. It certainly does not suggest heated air any more than cold air.] It has no reference to the temperature of the air. It is supposed to be atmospheric air of the ordinary temperature. [Lord ABINGER, C. B. You see, if he had put "an improved mode of applying air," that might have involved

a process he did not mean. It is an "improved application of air."] I submit that under this title for which the patent is granted there is no specification of the invention for which the patent is granted, for the patent is granted for an "improved application of air to produce heat," and what is specified is not an improved application of air, but an alteration in the quality of the air, not in the application of it. [ROLFE, B. The application of improved air instead of an improved application.] It is not an improvement of the application, but it is an improvement of the air. The title is for an improved mode of applying, but the specification is not an improved mode of applying, but it is for an improvement of that which is to be applied ; and although you may say that hot air is air, and that cold air is air, still this not only does not contemplate any alteration in the air to be applied, but I say that it excludes it. It is a mode of applying ; it is not a mode of dealing with the air ; it is not what the air shall be—whether the air shall be hot or cold, whether it shall be a mixture of some other gas, or what it shall be ; but it is merely for the application of it, which properly looks to some improvement on the blowing apparatus, and does not at all contemplate any improvement by which the temperature of the air shall be altered, either by heating or cooling. [Lord ABINGER, C. B. It is to a certain extent an improvement in the application, and it proposes to apply the air by making it pass through some medium by which it will acquire heat before it enters the furnace. A particular form or shape or medium is no part of the patent, but it is that air shall pass through a heating process before it enters the furnace. Would it not be hypercriticism to say that it was not an improved mode of heating air ? The mere discovery of hot air or cold air would be nothing. Suppose it was a patent in these words : "A patent for an invention by which air shall be heated before it enters the furnace. I do not claim a patent either for the material or for the shape, but the air must pass through a process of heating before it enters the furnace."] If the patent had been in those words, it certainly would not have been liable to this objection, because that would

have been a mode of heating the air before it enters the furnace, and then he might have specified the mode in which the air is to be heated ; but this is not for a mode of heating the air before it enters the furnace, but a mode of applying the air. [Lord ABINGER, C. B. No, it is that the air shall be heated. "The particular mode in which it is to be heated I leave to you," he says. "My discovery is, that it shall be heated by passing through a heating process before it comes to the furnace."]

Next, as to the directions which are given. He first merely describes the common blowing apparatus, etc. Now, I may observe that there can be no doubt that some directions must be given as to the size and shape. It would not do merely to give an idea that the air shall be hot instead of cold. I think one of the witnesses said that he would dismiss the specification ; another, that he would make experiments ; some, that they would begin with a cubical form ; others, that they would begin with a tubular form. But I apprehend that this specification would be bad unless it gave some directions with regard to the size and the shape of the vessel in which this process of heating is to be conducted. You cannot have a specification for a mere notion ; you cannot have a patent for a notion or a principle ; you must show, according to the terms of the conditions, you must describe and ascertain the nature of the invention, and in what manner the same is to be performed. Is not this a most material part of the specification ? The whole novelty consists in this heating vessel, and he is to tell you how the process of heating is to be conducted. Then, after stating with regard to size what is clearly incorrect, he tells you, in the most absolute and unqualified manner, that the form or shape of the vessel which is to be so employed is immaterial to the effect. It is said there are different meanings which may be ascribed to the word effect ; that it is the result of the operation, the beneficial effect of making the iron. You are told in the most express manner that you may adapt the form of the vessel according to circumstances, and that the shape is wholly immaterial, be it sphere, cube or cylinder, whether a series

of spaces or a perfect cube or cylinder, long or short. But the fact turns out just the contrary, and the jury have found it so. One witness said there would be some good effect produced even from a cube, but it was quite clear that until the tubular form was adopted it did no good at all. [ALDERSON, B. The word "effect" may mean one of two things. It may either mean the effect which hot air will produce on the blast furnace, or it may mean the effect which fire applied to the vessel would have in heating the air ; which of those does it mean ?] So that your air is heated, it is very immaterial how it is heated, whether it be heated in a sphere or in a cylinder. It will not do for a person to say you are to introduce hot air into the blast furnace ; he must show the *modus operandi*. [ALDERSON, B. It will come very close upon Boulton v. Bull (1 *ante*, p. 59), the only *modus operandi* of which was the condensing in a separate vessel ; so here it is the application of heated air, the air being heated in an intermediate separate vessel. That is a *modus operandi* sufficient to save the patent.] But he tells you what that intermediate vessel is to be, and he professes to do that. [ALDERSON, B. He says no matter how you do it, provided in an intermediate vessel you bring it to a certain temperature. Then the effect will be the same on the blast furnace. My invention is hot instead of cold air.] He professes to tell you what is to be the size of the heating vessel, and he tells you that the form is immaterial. Everything depends on the degree of heat. Then what is the effect ? It is to heat. These various shapes of vessels are all material with regard to the degree of heat, the effect depending entirely on the degree of heat, and therefore the effect is the degree of heat. It was admitted at the trial that this must be erroneous and false, unless you can engraft upon the assertion two conditions—that you have a sufficient degree of heat, and that there shall be a sufficient current of air to propel the air from the regulator to the blast furnace. [Lord ABINGER, C. B. I suppose, in making the specification, he considered that it was proper to propose some mechanical illustration of his principle. But suppose he had said this : My invention

consists in the application of heated air to the furnace by means of any of the methods by which air is now heated, or any other method, and allowing air so heated to pass through a tube or aperture to the furnace. Probably he apprehended that if he stated specifically any form of heating air, he might then have infringed on some other patent ; therefore, suppose he had said simply, My invention consists in the application of heated air by making the air pass through a heating process before it arrives at the furnace, but I do not intend to describe the form of the receptacle ; I leave that to the local circumstances and judgment of the parties to deal with such matter, stating only that the hotter you get the air the better.] If at the time he knew what was the proper form of vessel, and he had specified as your lordship suggests, the patent clearly would have been void. [Lord ABINGER, C. B. Yes, if he had known it at the time.] Because he was bound to disclose to the public the most beneficial mode he was aware of for carrying it into operation. I should doubt whether such a specification would be sufficient, at all events it would not be untrue ; it might be defective, it would not be false. [PARKE, B. I left the question to the jury whether he had improperly concealed the discovery he made that the vessel would be better with divisions in it, because he had clearly tried that before the specification. The jury were of opinion that he had not been guilty of a fraud in that respect.] There was no fraud imputed to him ; it was pure ignorance. [ALDERSON, B. The blowing apparatus was perfectly well known ; the heating of air was perfectly well known ; the twire was perfectly well known as applicable to blast furnaces ; then, what he really discovered is that it would be better for you to apply air heated up to red heat, or nearly so, instead of cold air as you have hitherto done. That is the principle ; that is the real discovery ; but, in order to take out a patent, you must have an embodiment of the principle, and his embodiment of the principle is the heating of air in a separate vessel, intermediately between the blowing apparatus and the point where it enters the furnace. Then he says, "I do not mean to claim any shape

in which it is done ; it may be done in a vessel of any shape, provided only you have such a vessel of such a shape, and fire so applied as that, in the intermediate space between the blowing apparatus and the furnace, the air arrives at the red heat."] And to gain that object the size is to be always increased in proportion to the effect that you wish to gain, and the form and shape of the vessel are altogether immaterial ; this is what he tells you. [ALDERSON, B. Immortal to the effect in the furnace, but not immaterial as to the mode of obtaining heated air. That is the point of my difficulty.] It being the true legal construction to be put upon it, that the effect is the degree of heat to be produced, and the jury having found that the shape of the vessel is most material as to the degree of heat that is to be produced, here is a false description which at least has a tendency to mislead. The jury have found, in answer to questions that were submitted to them, that a person skilled in the blowing apparatus and a person skilled in the heating apparatus would not be misled by this false statement to be found in the specification. Is it to be a cure for a false statement, in a material part of the specification, that it is so very false that persons of skill could see that it was false, and instead of going by the specification, that they would throw the specification aside and enter on a course directly different from that which is recommended ? A specification must be a full communication of what is to be done and how it is to be done, and it has been repeatedly laid down that a specification which requires experiments is bad. Most of the witnesses in this case said they would make experiments as to what was the best shape. If a specification is bad without pointing out the *modus operandi*, if it points out a *modus operandi* which, if followed, would defeat the object, must it not, *a fortiori*, be bad ? and it is not enough to say that a skilful and scientific person would find out that there was a gross blunder. A person who is to follow a specification is not to draw on his own resources ; he is to follow implicitly the directions he receives, and if those directions would mislead him the specification is bad, although a person of

skill and science, canvassing it and reasoning upon it, would discover that there was a blunder, and the jury have gone so far as to say that a workman of ordinary skill would discover that it was wrong. [PARKE, B. Is there any case (the impression I had at the trial was, that there was no case) which went so far as to say that you might correct a blunder in the specification by the testimony of ordinary workmen only ; that they were to read expressions that were obscure to ordinary men ? Is there any case, supposing this to be a blunder, in which it has been allowed to correct that blunder by means of the testimony of men of ordinary knowledge on the subject ?] We can find no such case. What, then, does the case turn out to be ? That Mr. Neilson had a notion that hot air might be used beneficially. He supposes that the form and shape of the vessel are immaterial. It is said that some benefit will arise whatever the form or shape of the vessel may be ; he either does not tell you what is the proper form of the vessel, or he misleads you entirely by saying the form and shape of the vessel are immaterial. If they are material, he has stated in an important part of the specification what is false, what will mislead a workman in carrying his specification into effect ; and after that how can it be said that he has truly ascertained and described the manner in which his invention is to be performed ? On these grounds I submit that the defendants are entitled to retain the verdict on the fourth issue.

Pollock, against the rule. An expression which fell from Alderson, B., appears to be the key of the intention of the patentee, that he confounded the heat of the air vessel with the heat of the contained air. The directions given throughout the specification do not apply to the air, but to the vessel which is to contain the air.

I entirely agree with what fell from one of your lordships, that if it had been distinctly stated in terms like these—a blowing apparatus is old, methods of heating air are as various as any other processes in the arts, and my invention consists in raising the temperature of the air to 600 degrees Fahrenheit or thereabouts, by any process known

to the scientific or to the mechanical world, and then applying the air so heated—that might have been an exceedingly good patent for aught I know. But that is not the patent which Mr. Neilson has taken out. He had never made any experiment as to what was the proper temperature ; he had some vague notion that the heating of air was beneficial, without ever having reduced that notion sufficiently into practice, or made it the subject of experiment, so as to give it to the world. He appears to have made some experiments upon a small scale with smith's forges—where you would use a vessel so small that it would not present the difficulty of heating the air, on account of the surface to which the air was exposed being very considerable in comparison with the volume—and to have succeeded ; and then, by a process of induction, to have come to the conclusion that the multiplication of that process on a larger scale would be attended with beneficial results, without ever attending to the important element in enlarging these vessels advantageously, that you must take care, as vessels in point of capacity increase as the cube, and in point of surface increase only as the square, you must take care to alter your shape when you come to increase the size ; you must alter your shape if you enlarge your dimensions, so that the surface, which increases as the square, shall be in the same proportion to the volume, which increases as the cube, in order to produce the same effect on a large scale that you would on a small one. You will see, both from the evidence at the trial and from the specification, that this is the true solution of the difficulty into which Mr. Neilson ultimately got when he came to specify the invention. It is never mentioned that the air is to be heated, except as a sort of general conclusion. Air is never the nominative case at all. The heating the air vessel is the only one. [ALDERSON, B. It is so throughout.] I contend that the vice of the specification is, that it directs nothing but the heating of the vessel, and assumes the heating of the air as a consequence, and yet tells you that the shape and form of the vessel which is to be heated for the purpose of producing the result are quite immaterial to the effect to be

produced. I have no doubt that Mr. Neilson thought so ; that the experiments he had performed, the progress he had made in this discovery, were such only as to induce him to form that opinion ; he had not the least idea of the important principles that are involved in the extension of this discovery to larger and other matters, and therefore he gave a statement which was, so far as he was then concerned, perfectly candid ; that was, as far as he knew, perfectly true ; but when it comes to be applied to the larger and to the greater and more important objects, of which he had some notion, there is no doubt the information he communicated, that the shape and form are immaterial, turned out to be without foundation. Every witness was obliged to admit it was not true, and ultimately the jury found it was not true ; and then we come to this—is this to be corrected by the jury saying that a workman of experience would not be misled by it ? because that is, after all, the only point my friends can rest on as getting rid of the objection. It appears to me, looking at all the cases, that the rule laid down is something of this sort. If you make a mistake, as by calling air an imponderable substance, where you have described what you mean—you have described air—and it is manifest from the rest of the specification that what you mean is the atmospheric air which we breathe—it is of no importance whatever whether you have made the blunder of calling it an imponderable substance ; and the way in which that objection was put was this—that it might mislead the public to apply other imponderable substances ; but as the only imponderable substances which the philosophers admit are light and electricity— [ALDERSON, B. That is only a question whether it is imponderable because they cannot weigh them, or because they are not to be weighed at all.] [ROLFE, B. So you say that a fixed star is at an immeasurable distance, because there is no means of computing it.] Your lordships are aware that if the modern and apparently the more correct theory concerning light be true, that it is the vibration of a medium, and not the transmission of the particles—then light can no more be weighed than sound. I believe most persons who are com-

petent to entertain the opinion at all are now of opinion that it is a vibration and not the transmission of an actual substance. I think, also, there was a case, which is not reported, where sulphur was spoken of as a metal.

Where, therefore, by referring to another part of the specification, suppose to the drawing, an obvious mistake made is corrected—there are several cases of this sort not reported where it was left to the jury—where, for instance, two parts in a drawing appeared to be connected, but in the description it was quite obvious that by some incaution a connection was left which ought to have been cut off—you are to take the whole together, and if you may correct the statement by the drawing, you may correct the drawing by the statement. You have no right to fix on a particular blunder and say, This is what the man meant. No, he says, I do not mean that ; here is a mistake ; you must collect my meaning from the whole. But is there any case which says this—that if a man in the manipulation, or in the statement of the machine that is made, deliberately states something, not by mistake, but deliberately states it, and it turns out to be wrong and to be material—that in the very operation itself he makes a mistake—is there any case which will justify this doctrine that a skilful person coming in will see this, though an ingenious man did not thoroughly understand the subject ; it is a pity he did not make himself better acquainted with certain parts of it ; but I, coming in, can correct that, and I will do so ? Is there any pretence for saying that any case decides anything like that doctrine for your lordships ? It would place the whole law of patents altogether at the mercy of a jury. [ALDERSON, B. Lord Eldon lays down the principle so long ago as 1800. He says patents are to be considered as bargains between the inventor and the public, to be judged of on the principles of good faith, by making a fair disclosure of the invention, and to be construed as other bargains. That is the principle which must be taken to be the sound principle.] Exactly. [Lord ABINGER, C. B. I take the true distinction between a specification that a man of science may construe, and another man may not understand, is this : Where

the specification uses scientific terms, which are not understood except by persons acquainted with the nature of the business, the specification is not bad because an ordinary man does not understand it, provided a scientific man does ; but where the specification does not make use of technical terms, where it uses common language, and where it states that by which a common man may be misled, though a scientific man would not—when it does not profess to use scientific terms and an ordinary man reading the specification is misled by it—it would not be good.]

The judgment in *Rex v. Wheeler* (*1 ante*, p. 317) is conclusive. “A specification which casts upon the public the expense and labor of experiments and trial is undoubtedly bad. If it be said that all these matters will be well or easily known to a person of competent skill (and to such only the patentee may be allowed to address himself), then the invention will not in reality have given any useful or valuable information to the public ; so that, in either way of viewing the case, there is either no certain and clear process described, or the process described is such as might be practised without the assistance of the patentee.” If a person of skill is to come in, and by means of his skill and experience without experiment is to correct the blunder, and not to follow the directions, because he says that the writer of those directions did not understand the subject upon which he was writing and had not sufficiently matured his discovery, or performed his experiments so as to give the world the information they had a right to ask, and in consequence of that has fallen into that error, then, I say, this doctrine of *Rex v. Wheeler* applies. [ALDERSON, B. I take the distinction between a patent for a principle and a patent which can be supported is, that you must have an embodiment of the principle in some practical mode described in the specification of carrying the principle into actual effect, and then you take out your patent, not for the principle, but for the mode of carrying the principle into effect. In Watt's patent, which comes the nearest to the present of any you can suggest, the real invention of Watt was, that he discovered that by condensing steam in

a separate vessel a great saving of fuel would be effected by keeping the steam cylinder as hot as possible, and applying the cooling process to the separate vessel and keeping it as cool as possible, whereas before the steam was condensed in the same vessel ; but then Mr. Watt carried that practically into effect by describing a mode which would effect the object. The difficulty which presses on my mind here is, that this party has taken out a patent, in substance like Watt's, for a principle—that is, the application of hot air to furnaces ; but he has not practically described any mode of carrying it into effect. If he had, perhaps he might have covered all other modes as being a variation.]

[At a subsequent part of the case the following remarks, closely connected with the preceding, occurred :

ALDERSON, B. It is very difficult to see why Watt's patent was not for a principle.

Follett. It was not for the principle alone.

ALDERSON, B. It is very difficult to see what is a patent for a principle and for a principle embodied in a machine, because a patent can only be for a principle embodied in a machine.

Follett. Your lordship sees, if any strict rule is laid down on such a subject, what effect that would operate, because all great discoveries are, in fact, discoveries of principles ; and, therefore, if the principle is at all capable of being carried into effect, it seems extremely hard that a party who has made a most valuable discovery should not be protected.

ALDERSON, B. Only you cannot take out a patent for a principle.

Follett. Unless you point out a mode of carrying the principle into effect.

PARKE, B. It must be for a manufacture.

ALDERSON, B. I have always thought that the real test was this : that in order to discover whether it is a good or a bad patent, you should consider that what you cannot take out a patent for must be considered to have been invented *pro bono publico*—that is to say, the principle must be considered as having had an anterior existence before

the patent. Now, supposing in Watt's case it had been known that to condense in a separate vessel was a mode of saving fuel, then Watt certainly would have taken out a patent for carrying into effect that principle by a particular machine ; but then his patent would have been for a machine ; and if I invented a better machine for carrying out the principle, I do not infringe his patent unless my machine is a colorable imitation.

Follett. That would depend on the nature of the machine.

ALDERSON, B. But you must embody the principle in the machine, and you stop all possible improvements, because you infringe the principle, which you have no right to do ; it is the principle of the machine. It is very difficult for a jury to distinguish that, but it is the most essential thing possible. Now, here, supposing it had been known that hot air applied to a furnace was a great improvement on cold air, and that this person had taken out his patent, and this patent was a patent for the application of a well-known thing, the hot air to furnaces ; then he takes out a patent for applying it, by means of an intermediate reservoir between the blast furnace and the bellows ; then surely anybody else may apply the same principle, provided he does not do it by a reservoir intermediately between the blast furnace and the bellows, and the question for a jury is whether or not a long spiral pipe is a reservoir ; if it be not a reservoir, or a colorable imitation of a reservoir, it is no infringement.]

With respect to what has fallen from your lordship about taking out a patent for a principle, it is theoretically true, but practically it is not true. Practically, you can have a patent for a principle—that is, if you embody your principle in any clear, definite and distinct form, no other person shall be allowed to take that principle and embody it in some other form merely copied from yours. [ALDERSON, B. But then you must perform the previous conditions, and embody it in some practical form.] Yes, you must develop your principle, and you must correctly develop it, and you must put it in some shape, and when you

put it in that shape no person can be allowed to come and steal the spirit of the invention, and put it into some other shape different from yours, provided the jury think that that other shape is an imitation of your shape. Here the party states that the shape and form are immaterial, whereas not only the witnesses did prove the fact, but without proof it is abundantly obvious, and it is quite clear that the shape and the form are of the very essence of carrying it out to the extent of which Mr. Neilson complains ; that is, an imitation or an infringement of his patent. [ALDERSON, B. You see, you do not interfere with any benefit which the inventor has, if the inventor knows of no particular mode of carrying his principle into effect ; you do not interfere with any benefit which he ever had, if he never had a practical mode of carrying it into effect. Your practical mode of carrying it into effect does not interfere with him. Then the question is whether that is so.] I trust that the direction of the learned judge who presided at the trial will be considered as perfectly correct, that the specification contains an important statement with reference to carrying into effect the supposed invention, which statement is not true ; and that it is contrary to the first principles of law that with reference to an instrument of this description a jury might be permitted to say that because a person coming with skill adapted to the subject might correct that blunder or misstatement, that, therefore, the specification is in compliance with the proviso contained in the letters patent.

Follett, in support of the rule to enter a verdict for the plaintiffs. It is necessary that we should understand the position in which the parties were at the time this patent was taken out, what it was taken out for, and what it is that has been done under it ; for I do not deny that improvements may have been made on the patent of Mr. Neilson—that parties may, by experiment, have improved on what he discovered. It may or may not be so. The form of vessel used by the defendants may be the best adapted, or it may not be, for heating the blast furnace. If it be an improvement, or if there be anything in that invention or

in that mode of carrying it into effect which is an improvement on the patent of Mr. Neilson, it may be that the parties might have been entitled to a patent for that improvement; but I deny their right to use that vessel or to use that mode of heating the furnace during the existence of Mr. Neilson's patent. Now, I would pray of your lordships to consider the position in which the parties stood at the time the patent was taken out. It is said to be a patent for a principle. The real discovery in truth was this, that inasmuch as prior to Mr. Neilson's discovery the iron-masters and smelters of iron had used the blast for the blast furnaces cold, that they had considered the cold blast the best adapted for the purpose of the furnaces for smelting iron—that was the course adopted prior to this patent—the principle of this discovery, and the principle for which the patent is taken out, accompanied with the mode of carrying it into effect, is, that instead of using cold air it will be an improvement in the smelting of iron to use heated air in the furnace. That is the valuable discovery. I agree that that in itself is a mere principle; it is, that you are to use hot air instead of cold—a very valuable discovery, and a most important one. Then it is necessary that the patentee should not only have discovered that principle, which is in itself so valuable, but that he should find out a mode by which air may be introduced in a heated state into the furnace; and if he finds out a mode by which air may be introduced in a heated state into the furnace, then I apprehend he is entitled to take out a patent for the valuable discovery he has made, accompanied with the mode of carrying it into effect. That is the position in which Mr. Neilson stood.

It has been said that Mr. Neilson was not aware of the nature and principle of his discovery. It arose from the knowledge of the fact that, if you poured the air in a cold state into the furnace, the operation of the heat would be employed to heat that cold air, and that if you put it in a hot state that degree of heat would not be taken from the combustible materials in the furnace. That was a discovery partly from knowledge and partly from experience in the

heating of furnaces. Now, that is to be carried into effect. The way of heating air was not a discovery of Mr. Neilson's, and I cannot help thinking that a great part of the argument on the other side and a great part of this discussion have arisen from confounding the heating of air with the application of heated air to the furnace. The mode of heating air was perfectly well known ; it was no discovery of Mr. Neilson's ; everybody knew it. Air had been heated, and there had been different shaped vessels employed for heating the air ; for heating the air economically, and for heating it to a higher or lesser degree of temperature ; all that was perfectly well known. Mr. Neilson, therefore, does not profess to take out a patent for heating air, nor does he profess to give any instructions or give any directions as to the mode in which air can be heated, because that was a matter perfectly well known before ; and I apprehend that if he had made as a part of his patent any statement with respect to the principle of heating air, as that of giving a more extended surface for heating, or described any mode by which the temperature might be increased, and had inserted that as a part of the specification of his patent, the patent would have been altogether bad, because that was perfectly well known and practised at the time. The mode of heating air being known, and the principle of Mr. Neilson's discovery being that it would be better to apply air heated to a furnace, what is it he claims by his patent ? Does he give any mode of carrying that principle into effect ? Now, I will read, without any statements of my own, the observations of one of your lordships on that point, because it puts the matter in a very clear light. I do not read it in the way of a judgment, but as a suggestion coming in as to what really was done by Mr. Neilson with regard to this patent. The learned judge at the trial stated the ground thus : " If the specification is to be understood in the sense claimed by the plaintiffs, the invention of heating air between the time it leaves the blowing apparatus and is introduced into the furnace in any way in any close vessel which is exposed to the action of heat, there is no doubt that the defendants' machinery is

an infringement of that patent." What the learned judge there referred to was the question upon this passage in the specification, which has been the subject of discussion before your lordships, not that the patent was not good, because it was only for a principle, because here there is a mode of carrying that principle into effect, and the mode of carrying that principle into effect is this—that you shall heat the air in a closed vessel, between the blowing apparatus and the furnace, and the air is to pass from the common blowing apparatus into a closed vessel ; and in that closed vessel it is to be heated, and then to pass from that closed vessel into the furnace. Now, there may be many other modes suggested, for aught I know, in which heated air may be introduced into blast furnaces. It may be so ; but the patent of Mr. Neilson is for introducing heated air into blast furnaces, by means of a vessel which is to heat the air between the blowing apparatus and the furnace. Now, that is the patent which Mr. Neilson takes out. There is, therefore, a distinct mode of carrying the principle into effect. Now, one of your lordships observed that the blowing apparatus was perfectly well known before ; the heating of air was perfectly well known before ; you therefore have a blowing apparatus well known, you have the heating of air well known, and you have the mode of smelting iron in a furnace well known. What is this patent taken out for ? Why, the patent is taken out for passing the air hot instead of cold, and by doing it in this mode—namely, by having one close vessel between the blowing apparatus and the furnace. What is there, therefore, to find fault with in the patent as regards the discovery of the plaintiff, no doubt a most valuable principle ; though I do not deny that my friend may be perfectly right in this, that since Mr. Neilson's discovery a mode has been found out by which there may be a great economy of fuel. I do not mean fuel in the furnace, because there is no evidence of that at all ; the great advantage of the different shaped vessel is that you save the fuel in the heating of the vessel, and which becomes less expensive by having a particular construction of vessel to save the fuel there. [PARKE, B.

You save the fuel in the furnace also by introducing hot air.] Yes, my lord, by introducing hot air. [ALDERSON, B. They only save fuel in the operation of heating the air.] That is to say, by making the heating vessel of the construction which they say they now do, those vessels require less fuel to heat them in the furnace between the blowing apparatus and the smelting furnace than they would if made of the shape which Mr. Jessop, who was the first witness, an iron-master, used ; he used the bottle-shape. They save fuel, and therefore they are more advantageous. And, my lords, they may also do this—they may raise the air to a higher temperature by being of that shape. [PARKE, B. And that saves fuel in the furnace.] That there was no evidence of, because there seems a discrepancy of opinion on the subject whether the heating of the air carried beyond a certain point is or is not beneficial. [PARKE, B. There is no difference of opinion upon the evidence as to that the greater the heat of the air the better. But the difficulty of that is, that it renders greater expense necessary in constructing the furnace of such materials as to resist great increased heat.] There is a difference of opinion as to whether the carrying the air above a certain temperature may be beneficial or not ; but the question on this rule is whether upon the specification and evidence there is anything to render the patent wholly void. It has been said, “ Is it right that, after the iron-masters have brought this to such perfection, Mr. Neilson shall come and say this is an infringement of my patent ? ” Why may I not retort, whether after Mr. Neilson has made this most invaluable discovery, that the application of heated air to a furnace is so great an improvement, and has taken out a patent for that purpose, and the mode of carrying it into effect—that pending the existence of that patent, is it right to avail themselves of Mr. Neilson’s discovery and turn that discovery to their own profit and advantage without any compensation to him ? It may be perfectly true, for aught I know, that their mode of doing it is the best mode that can be adopted ; but it does not at all follow, therefore, that they have a right to infringe on the patent of Mr. Neilson,

who discovered that principle and the mode of applying it. It may be that they have made an improvement, and, as I said before, it may be the subject of a patent, yet the defendants are not the persons who did that. Other parties who have used this thing for years have paid Mr. Neilson regularly for a license, and your lordships will observe we are now approximating almost to the close of this patent, when these defendants have thought it right to set up this question, on the form in which they are using the vessel, as an answer to the claim of the plaintiff.

But on what grounds is it this specification is defective ? Your lordships will observe that it is not taken out even for the most effectual mode of smelting iron in a furnace—it is taken out for an improvement on the old method of smelting ; it is said this is an improved mode of introducing the air into the furnace for the purpose of smelting iron ; that is all that the patent is for. And I apprehend that if that specification had described an improved method—if it had shown an improved method of introducing the air into the furnace—there would have been no objection to the validity of the patent, although it might turn out that other improvements and other discoveries may show that the discovery of the patentee himself might be carried into still more beneficial effect ; it would not make his patent void, because he has taken out his patent for an improvement on the old mode, and the question is whether his patent be or not an improvement on the old mode, whether it can be carried into effect beneficially so as to be a benefit on the old mode.

In this case all the witnesses stated distinctly that no experiment was necessary, but that any person of ordinary skill— [PARKE, B. That no experiment was necessary to produce a beneficial effect.] That is what I am stating ; I am not stating that experiments might not be necessary to make improvements on the discovery ; but I say the discovery is for an improvement in the mode of heating the furnace, and I say that no experiments whatever were necessary for that. Then I say, you have here upon the evidence a patent taken out for an improvement ; you have

a patent taken out for a principle carried into effect, which is said to be an improvement on the old course of proceeding, and every witness in the case states that, without any experiment of any sort or kind, no person of the most ordinary skill could fail in carrying it into effect. The patent says, I have discovered a valuable improvement in the smelting of iron ; I tell you my improvement is, you are to introduce the air heated ; I tell you how to do that, by placing the heating vessel in one part of this apparatus, pass your air through it and into the furnace ; there is no witness who does not say that that is an improvement—that it is a great improvement ; that it is worth while for any person to adopt it. Taking the words which the learned judge thought it right to put to the jury, taking everything into consideration relating to the expense, that it is an improvement that no one would hesitate to adopt ; that there is no one who could not carry it into effect, and that it is a great improvement, I ask, where is the objection to the patent ? And if any one tells me that since the patent was taken out I have discovered other modes of applying this which are more beneficial, that is no answer to the patent, because the patent does not profess this to be the most beneficial mode ; it professes to be an improvement, and it points out the mode in which that improvement can be effected.

The whole question upon the specification, supposing we are at liberty to enter into a discussion upon the meaning of words here (which I apprehend after the finding of the jury we are not), is on the meaning of the word "effect." It means the form or shape of the vessel is immaterial to the effect to pass hot air into the furnace ; that it is entirely immaterial as to the effect produced—that is, the passing of heated air into the furnace ; it does not mean it is immaterial to the degree of heat to be given to the air in the vessel, but that it is entirely immaterial to the effect of my patent, that being for passing heated air into the blast furnace, and you may heat the air in a vessel of any shape you like. You may adapt your vessel to the local circumstances ; you may heat your air by means of a vessel of a

tubular shape, square shape, pipe shape, or any other shape you like—it is still entirely immaterial to the effect for which my patent is taken out, for the air will pass from that vessel so heated into the blast furnace in a heated state. [ALDERSON, B. There is another sense to the word "effect," which would equally answer your purpose, which is this: if the vessel contain a certain number of cubic inches of air heated up to a certain point, the form or shape of the vessel is immaterial, because the access to the cold air, which is supplied from the blowing apparatus at a given rate, itself produces no effect, the effect depending upon the quantity and not on the shape; that will give full effect to the word.] Yes; but in this way of looking at it what I submit is, that the word "effect" does not mean the effect of the air in the vessel which is heating it, and that was the assumption which the learned judge made at the trial, and upon which the jury held it to be inaccurate.

It was not the intention of Mr. Neilson in this case to give any direction or to make any observation at all on the effect of heating air according to the shape or form of the vessel; and I say so for this reason, that your lordships are aware, and it is proved, indeed, by the evidence, that there were many patents at that time in existence for particular shaped vessels for heating the air. Now, supposing that one of those vessels for heating the air had been made adapted to a furnace in one particular place or situation, why, the party might use that vessel without any alteration of effect as regards the object of the patent—namely, the passing of heated air into a furnace; but it may so happen that another form of patented vessel for heating air might be used with much more economy of fuel, or might in fact produce a higher temperature with a less degree of expense, but still it would be perfectly immaterial to the effect on the furnace; the form or shape of the vessel would be wholly immaterial for that purpose, the purpose for which the patent was taken out. Therefore the word "effect" here, I apprehend, does not mean at all to apply—it was never considered by the jury to apply at all—to the degree of heat to be given to the air. And if you were to

take it even in the way Sir F. Pollock has, for the first time, suggested (for we never heard of this way of reading it at the trial), that the words in the other part apply to the vessel itself, that the vessel itself is to be heated to a certain temperature, that leaves still the question of the specification untouched, because if the vessel is to be heated to a proper temperature, no matter what its size may be, if the air be heated.

I submit to your lordships that the whole question upon the validity of the specification—that is, on the meaning of the specification, and whether it can or cannot be carried into effect, is a question for the jury, and not for the court, and that the jury are to put their construction upon the meaning of the words, and that the jury are to say whether the words are or not sufficient, and that it is for them to say whether the specification does sufficiently show the mode of carrying the invention and discovery, which the patentee supposed he had made, into practical effect. [Lord ABINGER, C. B. Why is the specification, which is a written instrument, more particularly to be considered by a jury than any other instrument? The meaning of scientific words must be matter of evidence.] [ALDERSON, B. The construction of it is surely for the court.] I do not know quite the extent to which it is supposed the authorities have gone in stating that certain papers are for the court. In many cases, undoubtedly, written papers are for the court, but I apprehend that is by no means a general doctrine of law; but that written papers which involve a question of fact like this, whether or not the party has sufficiently described the invention, that that written paper is for the jury and not for the court, because it is for the jury to say, as a matter of fact, whether there be or not a sufficient description in that instrument to enable the parties to carry it into effect. That I apprehend to be a question entirely for the jury. Certainly the whole of this is a question of evidence and a question of fact. It is a question of fact as relates to the paper; it is a question of fact as regards the evidence at the trial; it is not a question of law at all; and I do not know any rule which is to say that the

court is to construe that specification, and to take it from the jury, because, supposing the fact to be that evidence was given at the trial on scientific matters, which evidence would aid the meaning or the construing of the instrument, your lordships can have no judicial notice of that at all. If it be a written paper for your lordships to decide upon, it must be without evidence. It is not that your lordships can come to a conclusion upon the meaning of the paper by looking at the evidence at the trial, but if it comes within the rule that it is a written paper which the court is to act upon, then it must act upon the written paper alone. I think I can show your lordships that in every single case in which any question has arisen it has been submitted to the jury, not decided by the court. [Lord ABINGER, C. B. Not consistently with my recollections; I have always thought that the meaning of the specification was to be determined by the court. That meaning may be varied by the evidence of particular words. A man must gather as he goes along in order to construe the written instrument. It is quite new to me that it is not to be considered by the court.] [ALDERSON, B. Surely the court is to tell the jury what the specification has said. If the specification contains words of art the court is to say, If you believe these words of art to mean so and so, the specification has said so and so; leaving the question of words of art to the jury. But if there are no words of art, what the specification has said is to be construed by the court. Then it is to be left to the jury whether the specification having so said, it is or not a sufficient description of the invention according to their judgment.] I do not mean the validity of the specification as to questions in which you may direct nonsuits in point of law arising out of objections of a different kind, but that this question, whether or not the specification sufficiently describes the mode of carrying the invention into effect, that everything relating to that is for the jury and not for the court—the meaning of the passages in the specification and everything. I should submit to your lordships that the whole of it was for the jury and not for the court (*Hill v. Thompson*, 1 *ante*, p. 304; *Boulton*

v. Bull, *id.* p. 59 ; Minter *v.* Wells, 2 *ante*, p. 26 ; Turner *v.* Winter, 1 *ante*, p. 43 ; Bickford *v.* Skewes, reported under June 11, 1841, *post*). [ALDERSON, B. That there are some things in the specification which are questions of fact is true, and there are some things in the specification which are questions of law ; the construction is to be given by the court, but the intelligibility of it is for the jury.] That is all I am contending— [Lord ABINGER, C. B. The intelligibility means with reference to words of science, or matters in it which persons may explain so as to satisfy the jury. You are discussing an abstract principle where it is not necessary.; if you take an abstract principle, I must say the meaning of the specification is a matter of law, and that the judge must be informed, by evidence, of the facts, and then he must leave those facts to the jury, for them to find whether they be true or not.]

One of the points made in this case was as regards the sufficiency of the notice of objections. "That the said specification was calculated to deceive," is said to be a sufficient notice of objection. Now, for a moment, suppose that it is. The learned judge was good enough to leave to the jury, in the very words, whether or not there was anything in this specification calculated to deceive, and the jury found distinctly that there was not ; but in this act of Parliament it is said that the plaintiff is entitled to recover, unless the defendant prove the objection at the trial. The objection relied upon is that the specification was calculated to deceive—the jury have found that it was not calculated to deceive. That was the objection upon which the learned judge said the defendants are at liberty to offer the objection in evidence. The jury found all of the objections—in fact, they found that the specification was sufficient, and they found that the description of the apparatus to be employed was such that any workman of ordinary skill could make it, and they found that the specification was not calculated to deceive. The jury have found that the specification is sufficient to enable any workman of ordinary skill to construct the apparatus. [PARKE, B. A person acquainted either with the blowing apparatus or with the

heating apparatus.] In fact, that the specification is sufficient on the face of it, without any other help, to enable a person of ordinary skill, acquainted with the mode either of constructing a blowing apparatus or of constructing machines for heating air, to carry into effect this patent without any experiment, and without anything else than the specification itself ; so that the jury have distinctly negatived the point so much insisted on—namely, of the necessity of experiments. Now, it does seem extremely difficult to say, after this finding of the jury, that any objection can be made to the specification.

But the notice is not sufficient to let in the objection to the particular passage which is supposed to vitiate the specification. The act of Parliament requiring the objections received the royal assent at the close of the session of 1835, a considerable time after the alterations in pleading, which came into full effect in Easter Term, 1834. Whatever, then, the original intention of the framers of that act, it was passed considerably after it had been established by law, that every defence of this nature shall be specially pleaded, and we can only construe the act as it appears in the statute-book, without reference to the presumed intention of the parties who brought it in. It has been contended, on the authority of a case in the Common Pleas (*Fisher v. Dewick*, 2 *ante*, p. 490), that application should have been made to the court to compel the party to state more precisely the nature of the objections. But the question comes to this—when a party has given notice of objections, and it appears at the trial, whether or not you are not then to see whether he has given that objection in the way required by the act of Parliament, because the act of Parliament otherwise throws the onus and the burden upon him, and whether he has or has not established or proved that objection at the trial. In this case the plaintiffs could not have applied for a summons to have better particulars of the objections, and for this reason—the defendants do not rely upon the statement that the specification is not enough, but they state the principal objection, upon which they mean to rely, to the specification ; and, therefore, if

we had taken out any summons before a judge, the judge would have said, What objections can you make? The defendants have here stated, distinctly and precisely, the various objections to the specification. Then we go to trial upon those various objections to the specification, and there at the trial one particular objection is raised to the specification, and that particular objection is independent of those with regard to the making and description of the apparatus—and it is this, that one particular sentence in the specification is incorrect. At the trial no observation had been made upon this in the opening of the plaintiffs' case, but the Attorney-General, in his speech for the defendants, calling no witnesses, makes these observations on the specification. The learned judge thought that the objection that the specification was calculated to deceive was sufficient to let in the objection. I therefore requested the learned judge to leave it in terms to the jury, and the jury found that it was not calculated to deceive. The same question as to the notice of objections has arisen under the Bankrupt Act since the alteration in pleading, and it has been held that notice must be given with the special pleas. And in all cases when an act of Parliament requires a notice to be given, notice shall be given fairly to the party, and the objection is to be taken at the trial.

Suppose a party, in compliance with the proviso in the letters patent, enroll his specification, and in that specification he so describes the nature of his invention that a practical mechanic can carry it into effect; and suppose there should be some particular part of that specification which, when minutely or philosophically examined, may turn out not to be a correct statement and no part of the invention; for be it observed in this case it is not a question whether he has sufficiently or properly described the part invented, but it is supposed, in making a statement with reference to a matter well known at the time to everybody, he has made a mistake in the statement of a matter well known, not only to persons of science, but to every practical person; every practical person would know that there was an error, if error there be; then does it follow from that that the speci-

fication is void ? On what ground is the specification void ? The public are not misled ; the public have received all the benefit which was intended by the proviso ; nobody is misled. Then why is the specification void ? Upon what ground do you say that because I have made a mistake in a matter which everybody would correct, the most common mechanic, and which would apply equally well whether it was an error in the copying, whether it was a mere error in writing, any error of any sort or kind in the specification ? According to that even the misuse of a word would vitiate the whole specification, although any person reading it of the commonest skill (because that the jury have found) could not be misled by it. Now, my lords, I want to know why that should make the specification void ? You will observe that in this case it was no part of what he was communicating to the public ; he was not telling the public of any means of heating air ; he was not telling them the principle or the mode in which air could be heated ; that was no part of his patent, nor was he bound to make any communication on the subject ; it was no part of his invention or specification ; and then, in describing the mode of heating air, it is supposed for a moment that he has misstated a fact—namely, that the shape of the vessel may be unimportant as to the heating the air which we and the jury say anybody of the most ordinary skill would know was a mistake. I submit that a passage of this sort, assuming it to be inaccurate, does not vitiate the specification, if it be inaccuracy of this description, well known to the most ordinary and common workman, and not any matter on which the patent was taken out. Assuming, then, the view of the learned judge at the trial to be correct, that the word “effect” meant effect on the air, that would not make the specification void. [PARKE, B. The doubt I had was whether any case had gone so far as to say you could correct a manifest error in a specification by the evidence of workmen acquainted with the subject, that they should disregard the error and not act upon it and correct the error ; I do not think you have found any case that has gone so far as that.] I believe you will find no case in which any

specification was ever held invalid upon the ground of any misstatement of this sort or kind in it, where the jury have found that a common workman could carry the thing into effect ; and I will undertake to say that there is no such case to be found, and that no specification and no patent at any time was ever held invalid if the specification was sufficient for a common workman to carry the patent into effect, and that that is really the question in every specification of this kind, aye or no, does it give sufficient information to the public, and is a workman of ordinary skill capable of carrying it into effect ? This sort of objection as to the wording of a particular passage in a specification I am not aware ever to have seen ; it is not, my lords, an objection to a specification which I can trace in the books in any case. Where the specification is of itself sufficient to enable a common workman to construct the apparatus, I am not aware myself that your lordships, with your greater experience, can state whether there is a case in which the jury have so found, and the patent has, notwithstanding that, been held to be invalid on the ground of some mistake in one particular passage in the specification. I am certainly not aware of any such case, nor do I believe such a case is to be found, and I think I can further venture to say it is contrary to every principle which has been decided ; because it appears on this, that the proviso in the patent requiring a specification to be enrolled which shall give sufficient information to the public, upon which the whole discovery can be used by the public at the expiration of the patent, without any experiments by the parties, has been complied with ; and if the specification is sufficient for that purpose the patent is good. That, in truth, is the issue ; then, if that be found by the jury, and after the public have had all the benefit, is that patent to be held bad, assuming the finding of the jury to be accurate, which must be done here, because in one passage, in the construction put on it according to strict philosophical principles, that particular passage may not be true, and that not any part of the invention at all, but relating to a matter which was perfectly well known before ? [ROLFE, B. You say you are entitled

to import into this that you are to use some of the ordinary shapes of heating vessels ; and then you say a person will not be misled, because it is said that the shape is immaterial. Must you not go further and show that as to the shapes of vessels in ordinary use for heating, that between one shape and the other of those it was immaterial ?] So I apprehend it is. [ALDERSON, B. This is the very point upon which the infringement takes place—the shape of the vessel ; it is the very point in the cause. Therefore, if you are to take it in this sense, he is in effect claiming everything ; he is claiming a principle, and there is no particular machine, a machine of any size or any shape or any form.] That is the question upon the infringement ; but I should answer it with great deference thus : I say we do claim every vessel, and every shape of vessel, closed vessel, in which air can be heated between the blowing apparatus and the furnace. [ALDERSON, B. Then I think that is a principle, if you claim every shape. If you claim a specific shape, and go to the jury and say that which the other people have adopted is a colorable imitation, then I can understand it. If you claim every shape, you claim a principle. There is no difference between a principle to be carried into effect in any way you will and claiming the principle itself. You must detail some specific mode of doing it. Then the rest is a question for the jury.] Then the question comes as to what you mean by a specific mode. Is it or is it not the subject-matter of a patent that a person has discovered a valuable principle—namely, that heated air passing into a blast furnace is better than cold air, and that he points out a mode by which that principle can be carried into effect ? And, my lords, what is that mode ? The mode is that you shall heat the air in its passage from the blowing apparatus to the furnace ; that you shall pass it into a closed vessel, under which a fire is to be placed, between the blowing apparatus and the furnace ; and that in that vessel so placed between the blowing apparatus and the furnace the air is to be heated ; and I say, with great deference to your lordships, that until this court decides otherwise I shall venture respectfully to submit that there

could not be a doubt that that was a good patent, that it was a good subject-matter of a patent, and that the party had a right to complain of an infringement against any person who should heat the air in its passage between the blowing apparatus and the furnace by means of any vessel, whatever be its shape, provided that vessel was a closed vessel placed between the blowing apparatus and the furnace, subject to the heat there, and the air heated in its passage. That is precisely the same principle which is laid down in these other cases, and what, I venture to submit to your lordships, is the subject-matter of this patent, and I say the form and shape of the vessel are entirely immaterial. Let me suppose for a moment that there was no such passage in the specification ; would your lordships then say that I, having taken out a patent to apply this valuable principle for heating the air in the vessel between the blowing apparatus and the furnace, was bound to specify some particular shaped vessel, or whether it was not sufficient for me to say any vessel in which you can heat air ? [Lord ABINGER, C. B. I understood you to say this : " My invention is to apply the principle of heating air in its passage to the furnace by introducing it into an intermediate vessel between the bellows and the furnace, in which it is to be heated by fire, no matter what the shape or size of the vessel is ; that must depend upon circumstances and the judgment of the party ; I do not claim a patent for the particular vessel."] That brings the case to the same as Watt's patent for condensing in another vessel without describing the shape or the size.] I say it is utterly impossible to distinguish the two cases. [Lord ABINGER, C. B. It appears to me, I own, at present that a man might take out a patent for inventing a mode of heating air in a separate vessel without stating the size of it, but the question comes back to whether, in the description of the vessel, he does not mislead. Then you pray in aid the verdict of the jury, and say that he does not.] No doubt, my lord, and your lordship will observe that in arguing the case I assumed until this moment that we were fully at liberty to say the patent was perfectly good in the manner

your lordship puts it—namely, here is a valuable principle ; I tell you how to apply that principle ; heat your air between the blowing apparatus and the furnace ; you can heat it by passing it through a closed vessel ; place a fire under that closed vessel ; heat it in its passage ; you get it from the blowing power by means of a tube or pipe in that receptacle, and out of it by means of a pipe or aperture into the furnace. The form and shape are immaterial. I say that is a patent for applying a principle by a known and given method, and that any vessel by which air was heated in that place for the purpose of passing air heated into the furnace would be a violation of that patent. That was distinctly the opinion held by the judge, acquiesced in by my friend, and acted upon at the trial, that that was in truth the patent ; and the simple question is whether the specification is sufficient for the purpose. [Lord ABINGER, C. B. Suppose he had stated in the specification that he recommended a particular vessel for the purpose of heating air for which another man had a patent ; but he says, "I do not take out my patent for that ; the form and shape of the vessel are immaterial ; that appears to be the best."] That would be good ; and, I submit, that is in substance what he does say, and there is no question about this, that if he had done what it has been said so often he ought to have done—if he had pointed out a particular vessel for heating the air, and had not concluded with a disclaimer that he did not claim that as part of his invention, there can be no doubt the patent would have been void. Therefore, supposing he had described, for instance, a mode of heating the air through these pipes, if he had not at the same time said, "I do not mean to claim that as part of my invention," the patent would have been void for this reason. The mode for heating air through pipes was perfectly well known, therefore I have no right to claim it as part of my invention at all. I am not inventing a mode of heating air at all ; everybody knows it ; but I do claim this : I claim the principle ; for I have a right to say I claim the principle of applying hot air to a blast furnace, and I show the mode in which you can carry the principle into practical

effect, and that mode is by heating the air in its passage from the blowing power to the furnace. Therefore I say, whatever the form or shape of it, that would be a perfectly good patent.

I must now pray your lordships' attention for a moment to the meaning of the passage itself. It is stated that "the form or shape of the vessel or receptacle is immaterial to the effect, and may be adapted to the local circumstances or situation." There is no question, my lord, that that is not strictly true if the word "effect" means the effect on the air in the vessel. If it means that the form or shape of the vessel for heating air is immaterial for the purpose of heating air, there is no doubt that that is inaccurate, because the form or shape of the vessel for heating air, like the form or shape of the vessel for heating water, is material to the effect produced on the water or the air; therefore, if it means that it is immaterial to the effect produced on the air in the furnace, there is no doubt that it is inaccurate. But is that the meaning of it? Does it mean that the form or shape is immaterial to the effect produced on the air in the vessel, or does it mean that you may use any vessel you like for the purpose of heating your air? Now, I conceive that the view taken of it by my lord at the trial—who stated the way in which the jury were to look at it was, that it had reference to the heating of the air in the vessel—cannot be said to be strictly or philosophically true, because the shape of the vessel for heating the air, or the way in which the air is heated, may very materially affect the air so heated. I apprehend that is not what was intended to be expressed by this passage, and that the patentee here meant to say nothing and to give no directions whatever with respect to the air. I mean, as to the principle of heating it, he intended to give no description upon that as any part of his invention. But what is the meaning of this passage? It is that you, the proprietor of a blast furnace, may, if you please, select any form of vessel now used for heating air—you may use any form of it that you like—and it would be just the same as regards the effect upon the blast furnace, provided it be kept at a proper

temperature ; the effect of pouring heated air into the furnace will be the same, no matter what be the form or shape of the vessel which you use. The degree of heat to which you would raise the air may or may not be beneficial, or may or may not be increased beneficially ; but as to the effect—namely, the effect of passing heated air into the furnace, it is unimportant what be the form or shape of the vessel you use. I apprehend this was not intended to lay down as an axiom what was contrary to all ordinary principles of heating air—namely, that if you poured air into a vessel, it was immaterial whether the air was exposed to a larger or smaller quantity of heated surface. That was never intended to be said, but it was, that having heated your air properly, having used a proper vessel for heating your air, it is unimportant, as regards the effect produced upon the furnace, whether you use one description of vessel or whether you use another. You may adapt it to the local circumstances, you may use anything you like ; it will be immaterial to the effect produced.

The word “effect” occurs several times in the course of the specification, and in all cases it applies to the smelting furnaces or the forge, and it does not apply to the air in the furnaces ; and what I apprehend it means is this, that the air will come into the furnace without any mischief arising from the nature of the metal you use ; it will not alter the effect of the air on the furnace, nor the strength of the blast by its passing through a tube, nor the mode in which the air enters the furnace ; you can do what you please as regards heating the air. If you can only communicate with a tube or pipe with the furnace, it will produce the desired effect on the furnace. [Lord ABINGER, C. B. You do not construe the word “effect” as effect on the air, but effect on the furnace.] Yes, my lord, and I say that is the fair meaning of it throughout ; it makes no difference to the effect provided it be properly heated, which the whole thing assumes. [ALDERSON, B. The difficulty about that is that your view of the word “effect” in that particular sentence makes it almost nonsense, because it is utterly idle, surely, to say, if I have discovered that hot air produces an effect

on blast furnaces, everybody would agree that it would be immaterial, if heated to a proper temperature, what is the shape of the vessel.] Your lordship will find that persons acquainted with this manufacture were of opinion that it produced a very different effect on the furnace, according to the mode in which it was passed through for the purpose of getting to the furnace ; and as to the question whether or not they would use pipes for heating the air, one of the witnesses stated that it was the opinion that by using the pipes the air passed too rapidly, and that the consequence of that was that the effect produced on the furnace was not so beneficial ; and therefore the way in which the air passes into the furnace may be very material in the notion of some persons ; it was because, as the witnesses distinctly stated, the air may be materially affected by the mode of constructing the vessel through which you passed it. It was without reference to heat. The question was whether parties in applying this principle would use the pipes for the purpose of heating the air, and it was with reference to that—[PARKE, B. There was a prejudice against the use of stops in the pipe, because they thought it might destroy the proper force with which the blast came.] There was an impression of that sort in the iron manufacturers beyond all question, which rendered it necessary for the parties drawing the specification to point out to them that it was unfounded, and that the effect produced on the air in the furnace would be exactly the same whether you passed it through one form or another. That was distinctly stated in the evidence. There was that feeling, and that was one reason why they did not use the pipes to heat the air. Then, I say, this statement in the specification is—no matter how you heat your air ; heat it if you please with iron ; heat it with copper ; heat it with any other metal you like, it will not make any difference in the effect on the furnace ; heat it in any vessel you like—that is, pass it through pipes with rapidity, pass it if you please into a reservoir, as one of your lordships has stated ; use any mode you like, still the effect on the furnace will be the same ; therefore it is unimportant what metal you use for heating it ;

it is unimportant what shaped vessel you pass it through, and I apprehend, beyond all question, that is the meaning of it. Keep your air at the temperature you require for the furnace in which you mean to use it, and then it is utterly unimportant what metal or what form or shape you use for the purpose. If that be so there is an end of any question as to the effect of the finding of the jury. Surely, giving the other construction is a mere absurdity, because that is a statement of a matter which it was unnecessary to make a statement upon at all, because it was a matter having no reference to the subject-matter of the patent, and it was a statement notoriously untrue to every person acquainted with the ordinary principle of heating air ; therefore I cannot conceive why, in a patent taken out evidently for a great chemical discovery, by a person well acquainted with chemistry, and the way in which that could be applied, why your lordships are to assume that the sentence in the specification necessarily meant what was an absurdity, and untrue in point of philosophical and chemical knowledge. Therefore I submit, upon the face of this specification, the point does not arise as to what the effect of the finding of the jury is, for there is nothing inaccurate and there is nothing untrue in the statement of the specification from beginning to end. I believe that is the only passage in the specification upon which any question or doubt could have been entertained at any time. Then we come simply and entirely to this, is that one passage inaccurate ? That is the first question which your lordships have to decide ; and then, if it be inaccurate, has not the finding of the jury cured it ? I first of all submit that it is clearly not inaccurate ; I do not know why the court, where there are two constructions, should lean to that construction which will vitiate the patent, and, above all, should lean to a construction which is evidently absurd and false on the face of it. There are two constructions which at least it will bear, and I do hope and venture to submit that the court will adopt that construction which will support this patent. This is a patent on the eve of expiring, to which no objection has been raised, which the patentee has had

the benefit of, which will expire in one year from this time—namely, in 1842, and now the patentee is likely to derive the greatest benefit and the greatest profit from that discovery, which, as your lordships have heard from the other side, is one of the most valuable discoveries of modern times. This is surely not a case in which the court would be astute to be construing words of the English language in a sense which may vitiate the patent, when it is plain they may bear a meaning which will support the patent to the fullest extent. Upon that first ground I submit that no question arises ; but if it did, here is the finding of the jury—the point on the objections has been distinctly put, and found that no one could be misled, no one could mistake it ; I cannot conceive how, after that finding of the jury, your lordships can hold this patent void. The patentee has given to the public all that he was required to do—namely, a mode by which this most valuable principle and discovery could be carried into effect ; that he has pointed out minutely. Therefore I do submit to your lordships that the verdict of the jury ought to be entered for the plaintiffs.

Kelly, in support of plaintiffs' rule. I feel bound to call the attention of the court to the preliminary question whether it is open to the defendants to make the objection which is the subject of the present argument ; and I think your lordships will find that if upon the notice which the defendant has given in it is competent to him to raise that objection, the provisions of the statute to which reference has been made will be found to be wholly nugatory. Here is an act of Parliament passed after the rules of court, requiring all defences to be specially pleaded, under which act the defendant in an action of this nature is bound to give notice of all objections to the patent or specification on which he means to rely, and he is at liberty (that is an advantage given to him), even after he has delivered in a notice of his objections, to apply to a court or a judge to be at liberty to add further objections and to deliver a further notice of objections. What has he done in this case ? He has delivered in a notice of objections which con-

tains at the commencement an objection in this form : "The defendants further contend that the said patent is void, because no sufficient specification has been enrolled in conformity with the said letters patent in that behalf." Then follow several particular and specific objections ; that "the description of the apparatus to be employed is so defective that no workman of ordinary skill would be able to manufacture the said apparatus merely by reading the said specification ;" and then, that "the said specification is calculated to deceive ;" and further on, that "the specification is invalid on account of its general vagueness." Now, with regard to all these specific objections, on which reliance was made at the trial, the jury have disaffirmed them. They have found against the defendants on all these specific objections. But then it is said, "I will point out a particular passage in the specification which, being inaccurate in point of fact, renders the specification insufficient, and so renders the patent void ; and when it is objected that I have given no notice of that particular objection, I say that I have. And why ? Because I have said at the head of the objections that I make this general objection : that no sufficient specification of the said invention has been enrolled in conformity with the provisions of the said letters patent in that behalf ; and under that I may give every objection to the specification in evidence, which counsel can raise at the trial." Now, let us see what the effect of that is when we contend that the construction to be put upon this notice is that all the particular objections which are enumerated are those on which alone the defendants are at liberty to rely ; that, in truth, the notice ought to be read as if it were in this form : "I shall object that the specification is insufficient in this, to wit, that it is not sufficient to enable a workman to construct a machine ; that it is calculated to deceive ;" with other objections ; we contending that he says, "No ; I have a right at the trial to reject all the particular objections of which I have given notice, and to insist on any other objection which will come within the general form that the specification itself is insufficient ;" and when we contend that the objections would only tend to mislead

the plaintiffs, the answer is this : that if the plaintiffs find the notice of objections too general or insufficient, they may call on the defendants before a judge, on summons, to deliver further notice of objections ; and that is an answer which I apprehend seemed to weigh with your lordships when you were addressed by the Attorney-General. It seemed to be considered for a moment by the court that it is too late at the trial to object to the generality of this notice of objections, that the plaintiffs ought to have taken out a summons for a more specific notice. Now, let us see practically whether that is an answer to the objection which we made. Suppose we had taken out a summons before a judge that this was too general, and called for more specific notice of objections ; supposing on that the defendants had added twenty other different objections in addition to the three or four they had made before, and we then go down to trial. Why, my lords, they may still reject every one of which they have given specific notice, and fall back on the expression that the specification is insufficient. Why, then, if the notice of an objection of this kind is to be held to mean this, you need not trouble yourself about the specific objections ; they may be raised or not by the defendant at the trial as he thinks proper, but you must be prepared to support your whole specification and your whole patent, not on the specific objections of which notice has been given, but upon any other objection that can be possibly made, of what use is the statute ? In every case a defendant, who has been clever enough to discover some nice and critical objection in point of law to a specification, or in point of fact, as it may be, will introduce into his notice of objections a general objection—that is, that the specification is void, and he may then follow it up by twenty, twenty-five or thirty specific objections, to which, of course, the attention of the opposite party will be called, to which he will adapt his evidence when he comes to the trial ; they are treated as of no consequence by the jury disaffirming them, and then he goes back to some specific objection, which ought to have been specified, under the general terms he has given, and I know of no escape for that.

The Court of Common Pleas (*Fisher v. Dewick*, 2 *ante*, p. 490) have held that it is not a sufficient compliance with the statute to give a notice, which is a mere echo or a mere reiteration of the plea. Now, if that be once settled, I do think your lordships will find that to hold that this notice is in the present case sufficient to admit the raising of this question would be to render the statute entirely nugatory. There is a plea that the specification is insufficient, not stating in what it is insufficient. Here is a notice given of the objections on which the defendants mean to rely for proving that the specification is insufficient. They go on with the particular objections, and it is now to be contended that all those particular objections are perfectly immaterial, no evidence may be offered upon them, or the jury may negative them ; they may fall back upon the original notice ; and upon that they may raise any objections they may think proper. [PARKE, B. It is not exactly so ; they fall back on the objection that the specification is calculated to mislead.] If they do that the jury have negatived it ; if that is what they rely on, I am perfectly content, and then I say the jury have negatived that. [PARKE, B. That would be open to the question whether it was competent to me to leave such a matter to the jury ; whether the court is not to consider the instrument itself, and if they find it such as in their judgment would be likely to mislead, whether the patent is not void, although the jury were of a different opinion.] That may perhaps embrace the general question. [PARKE, B. It is obvious if there is not some such control over juries, it would leave it to juries—I should rather say to skilful engineers and scientific men on the part of the plaintiff—to make any patent void or not according as they please.] I do not think there would be any great evil in that if your lordships just consider— [PARKE, B. Whatever the terms of the specification may be, you may say it would be corrected by the evidence of practical men.] [Lord ABINGER, C. B. Your argument is this : that if you had taken out a summons to have better particulars, and they had given you more particulars, but still had left the general objection, that they might have aban-

doned all the objections at the trial, and given evidence under the general head of objections, which would have been a mere delusion.] [PARKE, B. The question is whether this court is of opinion, comparing the specification with the fact, that there is a clear misrepresentation in any part of it. The question is whether that can be corrected by the evidence of men acquainted with the subject, who say they would be themselves able to correct that error by their knowledge of the subject—whether that is permitted.] That may be a question arising in the cause. [PARKE, B. That is the question which I reserved for the opinion of the court. First, what is the true construction of the specification ; and if it was as it struck me at the trial, whether it was competent to correct such an error as that by the evidence of men acquainted with the subject ; I do not find any case that has gone so far.] That is, of course, one important question for your lordships' consideration on the argument, but that is not the question which arises on this notice of objections ; I am on that point only, which is a minor point, as to whether under this notice of objections, looking to the terms and the intent of the statute, it is competent to the Attorney-General to raise the question on this particular passage containing the word "effect" in the specification. This expression, "that the said specification is calculated to deceive," must be taken with what precedes it. And what is that ? That the description of the apparatus to be employed is so defective that no workman of ordinary skill would be able to manufacture the said apparatus merely by reading the specification. That the said specification is calculated "to deceive." It is almost a corollary or conclusion from that which has preceded it. He says this (and this is a mere question of fact for the jury) : "Why, your specification is such that no workman could make the machine in question from that specification alone, and so the said specification is calculated to deceive or to mislead." Now, that very question, in fact, was put by your lordship to the jury. The jury have found in every way in which it was put, under every modification of language, that the specification

was sufficient to enable any workman to construct the machine in question, and that it was not calculated to mislead or to deceive at all. So that, my lords, as a question of fact, and on these specific objections, I conceive that the jury have concluded the question ; they have found that the specification is not calculated to mislead or to deceive. The question is whether, if the finding of the jury has at once defeated this objection, of which specific notice has been given, the defendants can fall back on the general notice in the form in which it here appears ; that is, that there has been no sufficient specification within the statute ? If they can, it seems to me that the consequence will follow which I have suggested, and for this reason the answer given is that you may take out a summons before a judge, and the judge will order them to specify ; that is, to give you more specific objections. If we had done so, and they had given us more specific objections, they would only have multiplied the specific objections which they had already given ; they might have given twenty instead of three. [Lord ABINGER, C. B. Suppose the judge made an order on that, that they should deliver particular objections and strike out the general ones.] If there be any power at all in the plaintiff to defeat such a general objection as this, it must be because the judge might have power to order that this should be struck out, for that is what it would come to ; the judge must have power to order, not that the objection should be specified, but that the general form of objection should be struck out ; and that, with submission, I apprehend the judge has no power to do. [ALDERSON, B. I take it he has ; he has a general power of regulating those matters. Suppose you take the decision of the Court of Common Pleas, that that means objections differing from the plea itself, then any objection delivered in the words of the plea itself would not be an objection delivered under the statute. I do not know that I go that length, because I think that if the objection in the pleading is sufficiently specific, as stated in the words of the plea, I am not prepared to say that you need give a more specific objection. I do not know that you must necessarily. It may be that

the plea itself is quite sufficiently explicit, therefore it would be enough that it should be the words of the plea. It may be that the words of the plea are not sufficiently explicit; in that case they must be more specific. I am not aware that the Court of Common Pleas have laid that down.] I look on it that it really comes round to this question, whether upon the notice given, beginning certainly in the general form, and then being followed up by a number of very specific objections, whether the fair construction of that notice is not that it is the specific objections, and those alone, that are to be relied on; because, my lords, certainly one does not see how, if that be not the fair construction of a notice of objections of this kind, the statute can be of any use to a plaintiff; on the contrary, one would be led to infer that the statute would be mischievous, because it directed the attention of parties to some specific objections, leaving those perhaps on which the party means to rely entirely unnoticed, so that they are brought upon him by surprise.

With regard to the great question which is raised here, assuming that it is the province of the court to put a construction on the specification, it really turns on the meaning of the word "effect," and the meaning is this. We propose to attain a certain end, to bring about a certain effect by our patent; that is, beneficially to use hot instead of cold air in feeding furnaces, and we are giving you a description of apparatus and the means by which this may be done. One part of the apparatus is a vessel intermediate between the blowing apparatus and the furnace, in which air is to be heated, and we say, in order to attain the end sought by our patent, the form and shape of the vessel are immaterial. [ALDERSON, B. The end of the patent, as you say, I suppose is the application of heated air to the furnace.] That is the end and object, and I would take the very words appearing in the specification. The effect sought by the patent is the introduction of a sufficient quantity of heated air, and heated to a sufficient degree, into the furnace, to produce a beneficial effect in the smelting of iron. And therefore I conceive now that even if

your lordships have, as a matter of law, to put a construction on this sentence, or, in other words, on the meaning of the word "effect," that bearing in mind the nature of the patent and the object of the patent—bearing in mind also the object and use of the specification—that you will say the word "effect" here means the effect contemplated by the patent, and that it does not mean any particular effect, such as the degree of heat to be produced on anything else that imagination may suggest, and that if it be taken to mean the effect contemplated by the patent—namely, supplying a sufficient quantity of heated air beneficially to heat the furnace, and to effect a considerable improvement, that then for that purpose the form or the shape of the vessel is entirely immaterial. And, my lords, before I quit that subject I cannot help asking you what would be the case if the converse had been stated. It is said that this is untrue. If it be untrue, supposing what they meant to contend to be the truth had been stated—supposing they had said "the form and shape of the vessel or receptacle are material to the effect, and cannot be adapted (for it is all one sentence) to local circumstances or situation." Why, then, if we had said that the form or shape of the vessel was material to the effect, we must have stated what the form or shape was to be. Supposing the patentee had done so, what form or shape must they have stated? Must they have stated this, which happened to be the one the defendants use? The specification would have been void if he had done so, and void on two grounds: first, it would have been claiming then, as part of the invention, that which was no part of his invention, but was perfectly well known before. But, independent of that, I apprehend it would have been void on this ground—that if a person states in a specification that the form or shape of a part of the machine is material, that it must be of the form or shape he specifies; if the object be equally well attained in any other form or shape, the specification is void on that ground. Not only might it be pirated with impunity on that ground, for that would be of small consequence, but the specification itself would be void, for it would import that it could only be a

vessel of a particular and specific form or shape that the object of the patent could be obtained, whereas it might be attained, though not to so beneficial a degree, but still might be attained by a vessel in some other form much cheaper, and to particular persons under particular circumstances much more convenient.

I have submitted these observations on the assumption that your lordships have to put a construction on this sentence, and that it is immaterial whether the jury would have put a different construction on it. I would venture to submit that no authority is to be found for that proposition. If this be so, it is quite unnecessary to go down to trial. The question may be raised on the record ; the plea actually sets out the specification. [PARKE, B. You would want the fact that quantity of surface is material with a view to the effect. You must ask the jury that fact ; the question is whether you are to ask more.] You must ask it in the terms of the specification, and that was what we were perfectly content should have been done ; but your lordship put a construction on the word effect, and then, on the assumption of the word meaning that, asked the jury *simpliciter*, Is that true ? Of course it is not true ; the question here is whether it is for your lordship to put a construction upon this particular word. [PARKE, B. Suppose the specification set forth in the plea and the statement that the size and shape were material to the degree of effect produced.] That would not be a good plea. The answer to it would be, that you must look to the whole specification. [ALDERSON, B. It must not be pleaded in that form ; because that would be a denial that it would be material in whatever sense the word effect is used. The plea must state that it is immaterial to the effect produced in heating the air in the vessel.] Still, how could any determination be come to without the aid of a jury ? [PARKE, B. What facts are to be left to the jury ?] That is the question ; and with reference to this I would submit some observations on the nature and objects of the specification. It is not a contract or a grant or a libel which, subject to the right of the jury to put a construction upon

particular words, is to be construed by the court. The specification is to describe what the invention is, and to point out the mode in which ordinary workmen are to carry it into effect. In truth, it is nothing better than an instruction given by the patentee to workmen in the particular trade or business to which the patent may refer to enable them to exercise the invention ; it is generally addressed to scientific persons. [ALDERSON, B. You are proposing to leave to the jury the construction of that which really limits the amount of the right of the patentee as regards all subsequent inventions. To what an extravagant length that goes.] [Lord ABINGER, C. B. The question whether a patent is so worded as that a person of ordinary knowledge will understand it and work by it is for the jury. Then the jury find the meaning of the words, and what persons may understand by them ; but suppose a question to arise upon a specification whether a man has taken out a patent for a principle or an invention—who is to construe that ? The jury ? Suppose a workman says, The moment I see what the invention is (a new one) I know how to apply it, but all the instructions I do not follow ; still I understand perfectly how to do it ; it would not deceive me, because I should know he had made a mistake in every sentence ; it would not, therefore, be by following the instructions that he would make the invention ; it would be his own knowledge, science and experience that would tell him what to do.] However that may be, there is a distinction between considering the whole specification and taking any particular sentence, in order to determine the meaning of that sentence. Now, there may be some sentences in a specification which it might be proper for the court to construe ; but surely there may also be some sentences in a specification which it would be peculiarly the province of a jury to construe ; words—words of art, words of commerce, words which are used in some sense different from their ordinary sense ; those are for the jury, and the jury only, to construe as matters of fact. The present case is something between the two—it is something between putting a legal construction upon the whole specification as one instru-

ment, or even on any particular branch of the specification, and the putting by the jury a construction upon a particular expression. This is a sentence in the specification, and not a sentence in that part of the specification which proceeds to define the rights of the patentee or the extent of his invention, but it is a part of a mere direction to a workman to do the work ; he may be supposed to be speaking to a workman not at all about the extent of his own rights under the patent, but merely to be informing the workman as to the size, the shape, the metal of a vessel which is to be made as part of the machinery. Now, I cannot say that I see any evidence or any usurpation of the functions of the court in saying that where a man is giving directions to a workman in a particular trade or manufacture to construct a particular vessel, and those directions relate to the material—that is, the metal and the size and the form and the shape, that it may be for a jury to give a meaning to those directions. Suppose a person had been examined as to whether certain directions given by an engineer to a manufacturer for the making of a boiler or of a pipe were sufficient to have enabled the manufacturer to have constructed a particular instrument, and those instructions as to the size and the shape and the material of which the boiler was to be composed were set forth in special pleading, would it be a question for a jury what was the meaning of those instructions ? I apprehend that it would. The court cannot be supposed to know anything about the shape and size of boilers, or of the shape of vessels for heating air. The jury, by means of evidence, would know whether a particular direction for making a vessel to heat air had a particular meaning or not ; therefore, my lords, this really does seem to me to range itself within the admitted principle that the jury are to put a construction on words, and that which your lordships have laid down of leaving the construction of written instruments to the court. Conceding that, this is something between the two : here is a direction given by an engineer or a man of science to an ordinary workman to construct a vessel for heating air—he tells him, first of all, something about the metal or

material of which it may be made, and then he says the form or shape of the vessel is immaterial to the object you have in view, and that it may be adapted to local circumstances. [Lord ABINGER, C. B. You think the meaning of the word "effect" there is to be construed by the jury. That is precisely a case in which the meaning of the words should be construed by the judge. If the words be ambiguous, in one sense to support and the other to destroy it, I should say that this is to be contended in support of the patent; but the meaning of the word "effect" is for the judge to determine and not the jury. Whether the word "effect" means the effect in the hot air or the effect on the blast is a matter of construction entirely.] [PARKE, B. Assuming the construction I inclined to at the trial to be correct, I wish for some information by cases whether it is competent to arrest that by the evidence of scientific men, supposing there is an error.] I have not been able to find any authority in which it has been directly and distinctly held that a clear and manifest inaccuracy would not vitiate the specification. Neither do I find any authority for saying that an inaccuracy which would not mislead would vitiate the specification. I do not think that it would be safe to act upon extreme cases, because undoubtedly one may put a case of some very valuable discovery, but which was to be carried into effect by some known machinery, in which the machinery would be comparatively immaterial, and in which there might be such a series of blunders and inaccuracies in the specification as to contain, in fact, from the beginning to the end, an untrue statement of the *modus operandi*, and yet there might be workmen brought before the jury who would say, We understand this work so well that we should not be misled by it. But the question is whether any inaccuracy of language—the merely inaccurate use of a single word—it is here of the word effect—which will not mislead anybody, which will not mislead the manufacturer of a blowing apparatus— [Lord ABINGER, C. B. Nobody says that a mere inaccurate use of words, which words are often used, if they are explained by the context, will necessarily avoid

the patent.] I do not know what more this is. [ALDERSON, B. There was a remarkable instance, which we mentioned in the former part of the argument, where the French word "vice" was used.] That was the case of Bloxam *v.* Elseec (1 *ante*, p. 376). The French word "vice" meaning a screw; the English word meaning something very different; yet the word "vice" was used, and in an English specification. [Lord ABINGER, C. B. Yes, and the context showed what it meant.] [ALDERSON, B. I think that a picture, which was annexed to the patent, showed that it was a screw.] These cases go to this extent, to show that an inaccuracy in the use of an expression, or perhaps of several expressions, if looking at the whole instrument together, would not mislead any ordinary competent workman, they would not avoid the specification. It seems to me that if this construction is put on the word "effect" it could mislead nobody. But I rest this case mainly on the ground that at least one meaning may be put on it—namely, that for which we contend, and that your lordships will give it that meaning which is calculated to sustain the patent. And I further contend that this is not doubtful; that fairly and reasonably looking at the whole of the specification, the word "effect" means the object to be attained by the patent, and does not mean any particular effect or any particular part of the operation. On these grounds I submit that, looking to the specification itself and taking the finding of the jury, there is no substantial objection to the specification, and that the plaintiff is entitled to enter a verdict on the issue in question.

PARKE, B. In this case, at the request of my Lord Abinger, I proceed to deliver his lordship's judgment and that of the rest of the court on this question.

We have, after much consideration, and not without some doubt and hesitation, arrived at the conclusion that the present rule, obtained by Sir William Follett, for entering the verdict for the plaintiff on the fourth issue, should be made absolute.

Several points were made at the time of the argument, to

which we propose very shortly to advert. In the first place, it was contended that the objection to the specification on which I proceeded at the trial was not sufficiently raised by the notice given under the provisions of Lord Brougham's act, but we all think it was. We concur in the opinion of the Court of Common Pleas, in the cases cited by Sir William Follett, that the act must be construed to mean that a mere copy of the pleas will not be a sufficient compliance with its provisions. It was passed after the new rules had required the several defences to be pleaded, and must, therefore, be considered as having intended to give to a plaintiff some additional advantage beyond the information which the record would give him. But that did not mean to say, nor do we think the Common Pleas meant to decide, that it would not be sufficient in some cases to give notice in the terms of the plea itself ; the objection may be so completely and so fully expanded on the record that a mere transcript of the plea itself may be sufficient ; in other cases the plea may be so general in its language as to be insufficient as a notice, if transcribed from the plea merely. Each case must depend on its peculiar circumstances. But at *nisi prius* we think the only question for the judge is whether the language of the notice fairly includes the objection taken. If the notice be too general, a previous application must be made to the court or a judge at chambers for redress. Here the language of the notice was very general, and we think it included the objection relied upon.

Then we come to the question itself, which depends on the proper construction to be put on the specification itself. It was contended that of this construction the jury were to judge. We are clearly of a different opinion. The construction of all written instruments belongs to the court alone, whose duty it is to construe all written instruments, as soon as the true meaning of the words in which they are couched and the surrounding circumstances, if any, have been ascertained by the jury ; and it is the duty of the jury to take the construction from the court, either absolutely, if there be no words to be construed as words of art or

phrases used in commerce, and no surrounding circumstances to be ascertained, or conditionally, where those words or circumstances are necessarily referred to them. Unless this were so there would be no certainty in the law; for a misconstruction by the court is the proper subject, by means of a bill of exceptions, of redress in a court of error; but a misconstruction by the jury cannot be set right at all effectually. Then, taking the construction of this specification upon ourselves, as we are bound to do, it becomes necessary to examine what the nature of the invention is which the plaintiff has disclosed by this instrument. It is very difficult to distinguish it from the specification of a patent for a principle, and this at first created in the minds of some of the court much difficulty; but after full consideration we think that the plaintiff does not merely claim a principle, but a machine embodying a principle, and a very valuable one. We think the case must be considered as if the principle being well known, the plaintiff had first invented a mode of applying it by a mechanical apparatus to furnaces; and his invention then consists in this—the interposing a receptacle for heated air between the blowing apparatus and the furnace. In this receptacle he directs the air to be heated by the application of heat externally to the receptacle, and thus he accomplishes the object of applying the blast, which was before of cold air, in a heated state to the furnace.

Now, in the specification, after stating that the air heated up to red heat may be used, but that it is not necessary to go so far to produce a beneficial effect, he proceeds to state that the size of the receptacle will depend on the blast necessary for the furnace, and gives directions as to that. And then he adds, "The shape of the receptacle is immaterial to the effect, and may be adapted to local circumstances." It is this part of the specification which has raised the difficulty.. At the trial I construed this passage as meaning that the shape was immaterial to the degree of effect in heating the blast, and if this were so, the jury having by their finding negatived the truth and accuracy of this statement, the specification would be bad, as con-

taining a false statement in a material circumstance, of a nature that, if literally acted upon by a competent workman, would mislead him and cause the experiment to fail.

Nor do we think that the point contended for by Sir William Follett, that if a man acquainted well with the process of heating air were employed, this misstatement would not mislead him, would at all relieve the plaintiffs from the difficulty ; for this would be to support the specification by a fresh invention and correction by a scientific person ; and no authority can be found that in such a case a specification would be good. To be valid, we think it should be such as, if fairly followed out by a competent workman, without invention or addition, would produce the machine for which the patent is taken out, and that such machine so constructed must be one beneficial to the public. If, therefore, we had thought, on consideration, that the construction which I put on this clause of the specification was the true one, we should have concluded that the patent was bad, and we should have thought that the verdict should remain as found by the jury on the fourth issue.

But my lord and my brothers, after considerable hesitation, are of opinion that a construction may reasonably be put upon this clause which will support the patent ; and though I myself still entertain great doubt whether such is the true construction, I am not prepared to say that it is not, and I am very glad that in so meritorious an invention as this is admitted to be, in this view of the case, the inventor will not be deprived of his reward.

The word "effect" occurs four times in the specification ; and it is a just rule of construction to judge of the meaning of a particular phrase by taking the whole instrument together. In the first sentence the patentee, speaking of the temperature being as high as that of "red heat," adds that "so high a temperature is not absolutely necessary to produce a beneficial effect." Then he adds that the receptacle "may be made of iron, but as the effect does not depend upon the nature of the material, other metals or convenient materials may be used." Here he cannot mean

that all metals or convenient materials will equally be heated by application of external fire ; for some heat more easily, others more slowly ; but he means that the quality of the heated air, whether heated in an iron vessel or any other (if heated at a proper temperature), will not materially alter the beneficial effect on the furnace to which it is applied. "Effect" here, then, is equivalent to a beneficial effect ; and the passage is this, "But as the effect" to be a beneficial effect "does not depend on the nature of the material," and so forth. The same is, we think, obviously the meaning of the word "effect" in the concluding sentence of the specification. The manner of applying the heat to the air vessel is, however, immaterial to the effect if it be kept at a proper temperature ; in other words, the effect will be a beneficial effect on the furnace, whatever be the manner in which you apply heat to the air vessel, provided only that you so apply it as to raise its temperature sufficiently.

Then, if so, it is not unreasonable, we think, to construe the word "effect," in the sentence on which this question turns in a similar manner, and to hold it to mean an assertion by the patentee that, though the size of the vessel must be regulated as directed, yet the shape of the air vessel is immaterial to the effect ; that is to say, any shape will produce a beneficial effect, and may be adapted to the local circumstances. Now, if this be so, still it casts upon him the necessity of proving to the satisfaction of the jury that any shape in which the air vessel could reasonably be expected to be made by a competent workman would produce a beneficial effect and be a valuable discovery. On the present occasion we are bound, as to this point, by the finding of the jury, who have arrived at this conclusion of fact ; and if they are right, we think the verdict was not correctly entered for the defendant on this fourth issue, but that it should have been entered for the plaintiff. The rule, therefore, must be absolute.

There is another point, which I need only notice shortly, which was made by the Attorney-General as to the title of the patent. He contended that the title of the patent was

itself defective, and did not agree with the invention ; and he insisted also that it was competent to raise that objection upon the issue raised upon the fourth plea—and probably it was. But we have already intimated, in the course of the argument, that we thought that that objection was not well founded. The title of the patent is for the “improved application of air.” Though that is ambiguous, it is sufficiently explained by the specification, and is not at variance with it, as was the case in *King v. Wheeler*. Therefore we think the verdict on the fourth plea must be entered for the plaintiff.

Rule absolute.

BICKFORD *v.* SKEWES.

Queen's Bench, June 11, 1841.

(1 Web. P. C. 214.)

Rules in construing Specification. Questions for the Jury.

The sufficiency of the specification is a question for the jury.

The language of the specification ought not to be astutely construed, so as to overthrow a patent.

The specification is addressed, not to persons entirely ignorant of the subject-matter, but to artists of competent skill in that branch of manufactures to which it relates.

All the substances which will answer the purpose claimed need not be stated if the public be not misled.

The objection to the specification must be clearly stated.

Rule to show cause why a nonsuit should not be entered.

The action was brought to try the validity of a patent granted September 6, 1831, to William Bickford for “an instrument for igniting gunpowder when used in the operation of blasting rocks and in mining, called the miners' safety fuse.” The specification set forth the “manufacture by the aid of machinery and otherwise of flax, hemp or cotton, or any other suitable material, spun, twisted and counteried, and otherwise treated in the manner of twine-

spinning and cord-making, and by the several operations hereinafter, and in and by the drawings hereunto annexed, mentioned and described. By means whereof I embrace in the centre of my fuse, in a continuous line throughout its whole length, a small portion or compressed cylinder or rod of gunpowder, or other proper combustible material prepared in the usual pyrotechnical manner of fireworks for the discharging of ordnance, and which fuse so prepared I afterward more effectually secure and defend by a covering of strong twine made of similar material, and wound thereon at nearly right angles to the former twist by the operation which I call countering hereinafter described ; and I then immerse them in a bath of heated varnish, and add to them afterward a coat of whiting, bran or other suitable powdery substance, to prevent them from sticking together or to the fingers of those who handle them. And I hereby also defend them from wet or moisture or other deterioration, and I cut off the same fuse in such lengths as the occasion may require for use, each of these lengths constituting, when so cut off, a fuse for blasting rocks and mining ; and I use them either under water or on land in quarries of stones and mines, for detaching portions of rocks or stone or mine, as occasions require, in the manner long practised by and well known to miners and blasters of rocks."

The declaration alleged imitation of the invention by the defendants. The pleas were : 1. Not guilty. 2. That Bickford was not the first and true inventor. 3. That the invention was not, at the time the patent was granted, a new invention. 4. That the specification did not particularly describe and ascertain the nature of the invention.

Among the objections were that the words in the specification "or any other suitable material" were calculated to mislead, none others being described or any criteria given for ascertaining what was suitable ; that the invention was impracticable, inasmuch as gunpowder cannot be used unless mixed with other materials, and that no other proper combustible matter than gunpowder is mentioned.

At the trial before Coleridge, J., the plaintiff had a verdict on all the issues.

Bompas, in pursuance of leave reserved, moved for a rule to show cause why a nonsuit should not be entered, or a verdict for the defendant on the fourth issue; or why a new trial should not be had, on the ground of the verdict being against evidence.

The specification, in describing the materials of which the fuse is to be composed, uses the words "hemp, flax, cotton or any other suitable material." No evidence was given at the trial that the inventor had tried any other material than flax, or that any other would do. That description is not sufficient; a party has no right to throw experiments upon the public. The specification also uses the words "gunpowder, or other proper combustible matter." There was no evidence that any other substance than gunpowder would do. Colonel Pasley thought detonating powder might do, but he did not know. The insertion of this passage is mere speculation. The rules laid down in *Turner v. Winter* (1 *ante*, p. 43) are strictly applicable to the present case. [Lord DENMAN, C. J. Was there any evidence that the other things which he said would produce the effect would not produce it?] None. This specification is not accidentally but intentionally uncertain, meaning to grasp at more than the inventor himself had discovered, so as to keep other persons from using it or making other experiments. As to the plea whether it had been publicly used in England, the evidence was that there was an Irishman—of his existence there was no doubt, though no one knew his name—who went about selling a fuse exactly the same as the present fuse; that he exhibited it in a blacksmith's shop before those men who were there; that he let it off in the mine, and put it in water in the presence of everybody, and gave it to the workmen, who took it down, examined it and tried it—fired it off, and found it answer. This was in the street of Redruth, in the very centre of all the mining population. Many persons took it in their hands, they examined it, opened it, and saw there was powder in it, and that it was in the shape of a cord, and of so simple a description that if you put it into the hands of any workman he could, from simply seeing it, immediately make

another that would answer the purpose. It is nothing more than gunpowder in the middle of a piece of twine. Not that such an invention ought to be precluded from a patent ; the best improvements are the most simple ; the mere fact of showing such an article is a publication. Although a patent, supposing it to be good, is not less good because it is for the most simple invention that ever was heard of, still, if you make publication of so simple a thing, it is known to everybody the moment they see it. [COLE-RIDGE, J. I thought all this was for the jury ; there was a great deal of negative evidence on the part of the plaintiffs ; they called a great number of experienced miners, who said until this invention they had never known of anything like it.] Supposing this to have been used in this way, I submit it is a public user ; had this been repeated fifty times, can any one doubt that would have been a public user ? The true principle is this : in order to insure that when a person takes out a patent he shall be really the inventor, some precaution is necessary that he should not have had the means of learning it from other sources ; and therefore it is said if it has been publicly used, it is too late for a person to have a monopoly. What is there to prove that Mr. Bickford did not learn this from individuals who had seen it publicly ? That is what the rule is to guard against ; and the learned judge should have told the jury that there had been a publication of the invention.

[The following was the evidence as to the point at the trial :

Mr. Trengrove. I saw an Irishman ten or eleven years ago in the western part of the mine. He had some safety rods with him, which he offered to the men who were going under ground. He set one on fire ; touched the end with a fuse ; the powder took ; it burned all through, from end to end ; he threw it in water ; stamped on it and threw it about ; there was no putting it out. Outside it was hemp, bound round just the same as we are using now ; too much tar or rosin about its outside. I saw no difference between it and the safety.

William Clemens. I am a miner at Camborne ; reared

there and worked in the mines in the neighborhood twenty years ; worked at North Roskier ; began about thirteen years since ; at first they used quills. While working at North Roskier there was a man came round there ; they said he was an Irishman ; about ten or a dozen years ago ; saw him with a thing for blasting mines ; it was made of hemp or twine, just the same as what the safety is made of now. I do not know particularly what part of the mine I was in when I saw him there ; near the shop, but I cannot say exactly where it was ; I had two of them in my hand, about eighteen or twenty inches long ; we carried two underground, put it into a hole, opened the end of it, lighted it ; it went off very well ; he had several more pieces, but I did not see him do anything with it. Some time after I saw Bickford. I knew no difference between the two ; they burn in the same way. Mr. Thomas Davies worked there when I had this from the Irishman ; we were talking to one another about it ; he said there could be a little improvement. I saw the Irishman in the public-house the same evening ; he had plenty of these things with him there ; they were tied round in a bundle.”]

The case for the defendant was this. It was proved (by the witnesses on both sides) that a person answering the description had sold fuses ; that some iron-work had been supplied him for the purpose of making his fuses ; that he lived in a certain house in which there was some manufacture of fuses, which were described ; that some agreement took place at a public-house with Mr. Bickford on the subject of fuses, described to be substantially the same as those for which a patent was afterward taken out. There was no evidence of how Mr. Bickford made the first and the second fuses, or of how he got the machines made ; but the only evidence was that witnesses said there was a time when the fuse was not known—afterward these are sold ; and this is to be taken in connection with the number of witnesses who saw something of the kind before. [COLERIDGE, J. All that was put to the jury for you ; I thought it a strong part of your case.] The only evidence against us was the body of mining agents not having known of this public use.

Lord DENMAN, C. J. I think there must be a rule to show cause why a nonsuit should not be entered on the point of law arising on the specification, or why the verdict should not be entered for the defendant on the fourth issue ; but with regard to the verdict being against evidence, my brother Coleridge is of opinion the jury exercised their judgment on the subject. I have not the least doubt it was left fully to them to exercise that judgment, because it is clear, otherwise, it would have been a mere absurdity to ask their opinion on the effect of the evidence at all.

Rule accordingly.

The above rule having been argued, the judgment of the court was delivered by

Lord DENMAN, C. J. The invention, the subject of this patent, professes to be an instrument for igniting gunpowder when used in the operation of blasting rocks and in mining, and denominated the miners' safety fuse.

The fourth plea sets out the specification at length, and concludes by denying that the patentee had particularly described and ascertained the nature of the said invention, and in what manner the same was to be performed. The issue was joined upon this, and at the close of the plaintiffs' case it was objected that the specification was defective in two respects, and that the judge ought to have directed the verdict for the defendant. He thought that the question as to both was for the jury ; he then explained to them the specification, drew their attention to the supposed defect, as said to appear on the evidence, and left it to them to say whether they were made out, or either of them. We think he could not properly have pursued any other course.

The specification, so far as it is material to be now stated, was thus : "The instrument I manufacture, by the aid of machinery and otherwise, of flax, hemp or cotton, or any other suitable materials, spun, twisted and countered, and otherwise treated in the manner of twine-spinning and card-making, as by the several operations hereinafter and in and

by the drawings hereunto annexed, mentioned and described, by means whereof I embrace in the centre of my fuse, in a continuous line throughout its whole length, a small portion or compressed cylinder or rod of gunpowder, or other proper combustible matter prepared in the usual pyrotechnical manner of fireworks for the discharge of ordnance."

Upon these words it was first objected that the plaintiff had failed to show any other material but common gunpowder had ever been used in the fuse, or, if introduced, would answer the purpose desired, and the first part of this objection is true in fact ; but it seems to us immaterial if other materials not specified (and it is certainly not necessary to specify all), but still within the description given, will answer the purpose ; no ambiguity is occasioned—nothing that can mislead the public or increase the difficulty hereafter of making the instrument by the introduction of terms which import the patentee has himself used them. The latter part of the objection, if true in fact, would have been more material, because it does tend to mislead if it be stated that a whole class of substances may be used to produce a given effect, when, in fact, only one is capable of being so used successfully ; but there was reasonable evidence that other combustible substances, prepared in the manner described in the specification, would, if introduced, answer the purpose of the patent.

Colonel Pasley, a most competent witness, had no doubt one substance answering the description—namely, detonating powder, might be used ; and the jury were at liberty to infer that any similar substance, prepared as required by the description, would have the same effect. The other parts of the instrument necessarily limited the combustible substance to be used to such as are capable of being reduced to a fine powder, and introduced into a very thin continuous stream or thread into the centre of the fuse.

Some knowledge of pyrotechnics is and may probably be required in the person who is to read the specification for the purpose of making the instrument. The specification

is addressed, not to persons entirely ignorant of the subject-matter, but to artists of competent skill in that branch of manufactures to which it relates ; and such persons would be at no loss to select, if selection were at all necessary, the proper combustible material from those prepared for the discharge of ordnance for his purpose.

But the jury probably thought, and on the evidence might well think, that the language of the specification was in this part literally true, and that no selection at all was necessary ; and this brings us to the last objection, and the most relied upon, that there was a combustible substance prepared and used of the description in the specification which would not answer the purpose, and this, if true, would be important ; for then the specification would be substantially untrue and would deceive. The substance relied on is called portfire, by the application of which to the firing of cannon it is well known that they were at one time very commonly discharged ; but we think that there are two grounds on which we ought not to yield to the objection in a case in which we see no reason to infer from the language used any fraudulent intention to mislead the public or to make it unnecessarily difficult to understand or apply the invention. One substance, gunpowder, was the composition chiefly relied on as the most efficacious, the most obvious, the most easily procurable article for the purpose. At the same time, as, on principle, similar combustibles prepared as fireworks are would also have the same effect, words are introduced by the patentee which enable him to include them, for the double purpose of making it an infringement of the patent to use them during its existence and of directing the attention of the public to them after it had become public property. Language thus used ought not to be astutely construed so as to overthrow a patent, yet we have a right to require the objector should at the trial make his point clear and clearly call the attention of his opponent to it. This was not done, and we are at this moment left in doubt on the evidence what the term portfire means, whether it is the whole instrument, including both the case and combustible within, or whether it

means the latter only. If the former, it is clearly out of the question, and it was certainly so understood by the plaintiffs, for they called an officer of artillery to speak of it, in order to put it at once out of the case by showing the portfire as used in the service is a totally different thing from the safety fuse, and therefore did not interfere with its claims to novelty. The counsel for the defendant then asked a question or two as to the mode of preparing and combining the combustible within the case, from which was ascertained the fact of destroying the case as it burnt, and on this the objection was afterward raised. What the quantity of combustible was in the portfire—whether it would have the same effect of destroying the case if introduced into it in the very small proportion which the gunpowder in the fuse bears to the cylinder containing it, and many other matters necessary to the point, and establish the objection, were entirely passed over.

Upon the objection raised it was proper, indeed, to take the opinion of the jury, but if they thought it not established satisfactorily, we see no reason to disturb their conclusion ; and it may be also sustained on another ground. In one sense, undoubtedly, the portfire may be said to be used in discharging ordnance, because it ignites the priming or train, which causes the powder in the chamber of the cannon to explode ; but it may be well questioned whether the term discharging ordnance ought to be understood in that sense in this specification. The portfire, so understood, is no more than a mere match, but the fuse is used to perform the operation of a train, the fuse in it being concealed and the case unconsumed. It could not be used in discharging ordnance in the sense portfire is used for that purpose, as the portfire, whether we mean by that term the whole instrument, case and combustible, or combustible only, has not been shown to have been used or fitted for the discharge of ordnance in any other sense.

Whether we regard the imperfect manner in which this objection was presented, or its entire failure, in fact, if the specification be understood in one and by no means an unreasonable sense, we think the jury were not unwarranted

in their finding on the fourth issue, and that this rule therefore must be discharged.

Rule discharged.

CONSTRUCTION OF SPECIFICATION.—The construction of a specification is a question for the court except so far as meaning of terms of art is in question. *Derosne v. Fairie*, 2 *ante*, 78. In construing a specification, it should be taken as a whole and read fairly and so as to ascertain the meaning of the patentee rather than to overthrow it. *Russell v. Cowley*, 2 *ante*, 9. Inaccuracy in use of words in, will not vitiate, if the sense is sufficiently clear. *Derosne v. Fairie*, 2 *ante*, 78. Information cannot be acquired from any other source to sustain specification. *Morgan v. Seaward*, 2 *ante*, 262. Explaining specification by testimony is not allowable. *Brooks v. Ripley*, 1 *ante*, 465. Specification and letters patent are to be taken as one instrument. *Crossley v. Beverley*, 1 *ante*, 438. The terms of a specification must be interpreted according to the state of the knowledge at the time they were used and not to be taken to embrace subsequent discoveries. *Crossley v. Beverley*, 1 *ante*, 409. Specification not properly connecting in its terms the materials used with the process described. *Felton v. Greaves*, 1 *ante*, 416.

KAY v. MARSHALL.

House of Lords, June 18, 1841.

(8 Clark & F. 245.)

Patent for Improvement. Novelty. Practice on Appeal to the House of Lords. Verdict on Issue out of Chancery.

A patent had been obtained for new and improved machinery for preparing and spinning flax, hemp and other fibrous substances, by power. The improvement, as to the spinning, consisted in the placing of the retaining and drawing rollers nearer to each other (at the distance of 2½ inches) than they had been ever used before in flax-spinning ; the shortening of the reach being rendered practicable by the maceration of the flax in the new machinery for preparing it. But spinning-machines, varying in the distance of the reach according to the length of the fibre of the substance to be spun, had been in use before the patent was obtained. Held, that the machinery for spinning was not a new invention, and that the patent was not valid in point of law.

The House will not permit parties, on appeal, to raise objections which they did not raise in the court below.

Upon the return of an issue out of Chancery the Court of Equity regards the endorsement on the postea as the verdict.

Appeal from Chancery.

Various proceedings in the courts below are reported, (2 *ante*, pp. 186, 242, 250, 325, 416 ; 3 *ante*, pp. 35, 60).

This was an appeal from two orders of the Master of the Rolls, in a suit which was instituted by the appellant against the respondents, flax-spinners in Yorkshire, for an account and an injunction to restrain them from further infringing a patent granted to the appellant, which appears in connection herewith.

The bill stated that the appellant invented new and improved machinery for preparing and spinning flax, hemp and other fibrous substances by power, and obtained the letters patent therefor. The bill then set forth the letters patent, and stated that the specification particularly described and ascertained the nature of the appellant's invention and its several parts, and in what manner the same was to be performed ; and that he thereby declared that what he claimed as his invention in respect to new machinery for preparing flax, etc., were certain macerating vessels and a trough of water, and that what he claimed as his invention in respect of improved machinery for spinning flax, etc., was a wooden or other trough for holding the rovings when taken from the macerating vessels, and the placing of the retaining rollers and the drawing rollers nearer to each other than they had ever before been placed, say, within $2\frac{1}{4}$ inches of each other, for the purpose aforesaid.

The bill further stated that in the process of spinning flax by power the skein of flax commonly called a roving was drawn out immediately before its being spun by means of drawing and retaining rollers, the drawing rollers moving at a greater velocity than the retaining rollers. That in the machinery for spinning flax by power commonly in use prior to the appellant's invention the drawing and retaining rollers were placed at a distance of from twelve to twenty inches from each other, such distance being regulated by the length of the staple or fibre of the flax ; and that such machinery was not adapted to the spinning of flax in a wet or macerated state. That the appellant, after many experiments, discovered that by a new combination

of the drawing and retaining rollers—that is, by placing the drawing rollers at a distance of $2\frac{1}{4}$ inches only from the retaining rollers, the skein of flax or roving might be drawn out and spun in a wet or macerated state; and that when drawn out and spun in such a prepared state, a thread of a much finer and stronger texture could be produced than could be produced from the skein or roving drawn and spun with the machinery and according to the method in use prior to the appellant's invention. That the appellant having made such discovery, and having contrived machinery more convenient for preparing flax by macerating or wetting the same than any theretofore in use, and having also invented new and improved machinery for spinning flax in such macerated or prepared state, constructed on the principle of such new combination of the rollers, he obtained the aforesaid letters patent, applicable as well to his improved method of preparing flax as to his improved machinery for spinning flax when so prepared. That by reason of improvements made in the *preparation* of flax subsequently to the date of the letters patent, the process of macerating flax in the mode described in the specification had become altogether or in a considerable degree unnecessary; the skein of flax being by reason of the improved preparation thereof rendered capable of being sufficiently wetted for drawing and spinning, by being made merely to pass through a trough of water previously to being drawn out and spun, which, prior to such improved mode of preparation, and when the appellant obtained his letters patent, was not the case; but the appellant's said improved machinery for *spinning* flax when so prepared was a new invention, of great public utility and used to a great extent; and that by means thereof flax could be spun into a thread of a much finer and stronger texture than by the old method; and that since the promulgation thereof machinery made upon the principle thereof had been substituted for the machinery formerly in use, and great profit had been derived from the use of such new and improved machinery.

The bill then stated that the patent granted to the appellee

lant was a valid patent, and still in full force ; but that nevertheless the defendants had, without license, caused great quantities of new and improved machinery for spinning flax to be constructed upon the principle of his said invention, and had used the same in their spinning mills without making any compensation to him for the use thereof. And the bill charged that since the appellant obtained his patent new machinery had been introduced into the defendants' mills constructed on the principle of the said invention, and especially with regard to the position of the drawing and retaining rollers, which was a material part of the invention ; that the appellants had brought many actions at law against parties infringing his patent, who had all submitted and paid him damages ; and in particular against one William Renshaw, against whom he had recovered a verdict for damages, and thereby established the validity of his patent. The bill, after further charging that the defendants had much increased their business of flax-spinners and derived great profits from the use of the appellant's invention, prayed that they might be restrained from all further infringement of his patent, and that they might account for the profits derived from the use of the said invention in the spinning of flax.

The defendants put in a general demurrer, which came on to be argued in June, 1835, before the Vice-Chancellor, when his Honor ordered that it should stand over, with liberty to the appellant to bring an action. That order was afterward discharged by the Lord Chancellor, and the demurrer overruled by an order, dated February 1, 1836. (See *2 ante*, p. 185.) The defendants then, by leave, put in two pleas to the bill and an answer in support of them :

1. That the appellant had not before and at the time of the making of the letters patent found out and invented any new and improved machinery, as in the bill and the letters patent and specification was alleged.
2. That the appellant's alleged invention, as in the bill and letters patent and specification described, was not before and at the time of the making of the letters patent of much or any public benefit and utility.

The cause came on to be heard upon the pleas and answer in June, 1836, before the Master of the Rolls, when it was ordered that the parties should proceed to a trial at law upon two issues, directed in the terms of the pleas ; the judge before whom the trial might be had to be at liberty to endorse special matters on the postea. (See 2 *ante*, p. 250.)

The issues accordingly came on to be tried at the Summer Assizes for the county of York in 1836, before Parke, B., under whose direction a verdict was found for the appellant on both issues, with the following endorsement on the postea of facts found by the jury, viz. : "That before the granting of the patent, flax, hemp and other fibrous substances were spun with machines with sides, by which the reach was varied according to the length of the staple or fibre of the article to be spun, and that that has been a fundamental principle of dry spinning known and used before the granting of the patent ; the reach having varied in cotton-spinning between $\frac{1}{2}$ ths of an inch to $1\frac{1}{2}$ inches ; in flax or line spinning from 14 to 36 inches ; in tow-spinning from 4 to 9 inches ; in worsted-spinning from 5 to 14 inches. But before the granting of the patent it was not known that flax could be spun by means of maceration as having a short fibre at a reach of $2\frac{1}{2}$ inches, or about those limits. But before that time Horace Hall had taken out a patent for, etc., with a specification as annexed ; and the machines manufactured according to that patent were constructed with the reach of $4\frac{1}{2}$ inches." (See 2 *ante*, p. 325.)

The defendants moved before the Master of the Rolls that a new trial might be directed, or that a case might be directed for the opinion of the Court of Common Pleas. On the hearing of that motion on January 31, 1837, his lordship, with the acquiescence of both parties, as the respondents alleged, ordered a case for the opinion of the said court ; and that it be referred to the Master to settle such case if the parties should differ about it. (See 2 *ante*, p. 416.)

To the case afterward settled by the Master exceptions were taken by the respondents and allowed. The case as

finally settled by the Master and approved by the court stated the letters patent and specification, the due enrolment of the specification within six months after the date of the letters patent, the said order directing the issues, the issues so directed, the verdict found upon them, the endorsement on the postea, the letters patent mentioned therein as having been granted to Horace Hall, with the specification thereto belonging, and that the finding of the jury on the issues and the facts, as found and endorsed on the postea, were to be assumed as true. The question for the opinion of the court was "whether the appellant's patent was valid in point of law."

The judges of the Court of Common Pleas, after hearing the case argued, certified that they were of opinion that the patent was not valid in point of law; and their lordships sent with the certificate their reasons for their opinion. (See *ante*, p. 35.)

The cause came on to be heard on further directions before the Master of the Rolls on May 27, 1839, and afterward stood for judgment till July 16, 1839, when his lordship being of opinion that the patent was invalid, ordered that the appellant's bill should stand dismissed, with costs both at law and in equity, except the costs of the issues. (See *ante*, p. 60.)

By an order of the Privy Council, dated June 13, 1839, between the last hearing and judgment, the patent was extended for a term of three years beyond the fourteen for which it was originally granted. (See *ante*, p. 56.)

The appeal was against the orders of January 31, 1837, and July 16, 1839, and also against the proceedings subsequent to the first of these orders.

Pollock and *Kindersley*, for the appellant. The order of January 31, 1837, for the case to the Court of Common Pleas, ought not to have been made. The respondents' pleas, their only defence, having been falsified by the verdict of the jury, the appellant was entitled to a decree in the terms of the prayer of his bill. The respondents tried every sort of defence; first by demurrer, in which they failed; then by plea and answer, in which they had no

better success ; and lastly, by a trial at law, in which they were defeated and the appellant's patent was established. The respondents having put their defence to the bill on pleas—which they were allowed by the extraordinary indulgence of the court to plead, in a very objectionable form, after the time of pleading had elapsed—it was not competent for them to abandon that defence and set up another, but they ought to be held to stand or to fall by the pleas they put on the record. Lord Redesdale, in his "Treatise on Pleading," says if a plaintiff conceive a plea defective in form or substance, he may take the judgment of the court on its sufficiency, and upon argument of the plea it may be allowed simply, or the benefit of it may be saved to the hearing, or it may be ordered to stand for an answer. If a plea is allowed, or a plaintiff without argument thinks it, though good in form and substance, not true in fact, he may take issue on it and proceed to disprove the facts on which it is endeavored to be supported ; for in that case the truth of the plea is the only subject of question remaining, so far as the plea extends. If the defendant then fails in proving the facts suggested by the plea, so that at the hearing the plea is held to be no bar, and the plea extends to the discovery sought by the bill, the plaintiff is not to lose the benefit of that discovery. In this case the defendants did fail to prove the truth of the facts of their pleas. The issue was directed, in the terms of the pleas, to try the facts suggested by them ; and the verdict negativing the facts ought to be held conclusive against the defendants, not only in reference to the practice of pleading, but also in reference to the third and fifth sections of the new Patent Act. Prior to that act a defendant was at liberty to make any defence he pleased to a suit for infringing a patent ; but now by the fifth section of the act he is required to give notice of any objections to the patent on which he means to rely at the trial, and no other objection shall be allowed to be made. The question is whether, under these circumstances, the Master of the Rolls, seeing, when the case came before him on the verdict, that the pleas were falsified by it, ought not to have given his judgment for the appellant,

instead of ordering a case for the Court of Common Pleas. The question annexed to the case was, as construed by that court, immaterial to the issues raised by the pleas, and the order so construed was irregular, as varying on motion the decree made on the original hearing of the pleas.

The opinion of the Court of Common Pleas cannot be supported in law ; it did not apply to the letters patent or to any defect on the face of them, but to the form of the specification, a point which was not raised by the pleas at all. The points raised by the pleas and by the issue, and also on the case sent to that court, was whether the machinery of which the plaintiff claimed to be the inventor was new, and whether the invention was of public utility. That machinery, though the defendants attempted by their pleas to divide it into two distinct processes, was one combined operation, by maceration of the fibres and contraction of the reach, spinning flax at a distance of $2\frac{1}{2}$ inches between the rollers ; and the jury having found it to be new and useful, there was nothing on the face of the patent to make it void. The verdict of the jury was not neutralized or invalidated by their finding of the facts endorsed on the postea ; that endorsement applied to matters stated in the specification. [Lord COTTENHAM, L. C. A court of equity regards as much the endorsement on the postea as the verdict ; the whole inquiry being for the information of the judge in equity.] It is not denied that the endorsement is part of the finding of the jury. Both together showed no good defence in law to the relief prayed by the bill. Some parts of the plaintiff's machinery described in the specification were not, nor alleged by him to be new ; but the whole combination was new, and produced the most important results to manufacture. It seldom happens that the most useful inventions are perfectly new or the result of pure science. Sir Humphry Davy's lamp is one of the few exceptions ; philosophical instruments are also to be excepted. The patent laws protect every new combination or variation of machinery applicable to useful purposes. Of that description was Neilson's patent for blowing blasts of hot air into furnaces, and also a patent taken out for cleaning lace by

an argand lamp lighted with gas, the novelty of which was the substitution of gas for oil. It was no part of the judgment of the Court of Common Pleas that the appellant did not discover what was new and useful ; but they held that his specification containing two separate things, both useful, but one only new, was bad, and therefore the patent was void. The jury found that the appellant invented something deserving a patent ; the court did not deny that finding, but said the specification claimed something that was not new, and that vitiated the patent. This case is distinguishable from *Brunton v. Hawkes* (1 *ante*, pp. 327, 336) and *Boulton v. Bull* (1 *ante*, pp. 59, 97).

The opinion of the judges of the Court of Common Pleas forms no part of the record in the Court of Chancery, and consequently is not the subject of appeal ; but the judgment of the Master of the Rolls declaring the patent invalid and dismissing the appellant's bill with costs, which is appealed from, is founded on the same misapprehension of the claim of invention as described in the specification, instead of what is actually protected by the patent ; and to that judgment the same objections apply. If the opinion certified by the Court of Common Pleas cannot be sustained, neither can the judgment of the Master of the Rolls, which ought therefore to be reversed, especially when it is remembered that the appellant had fourteen years' enjoyment of his patent, which he defended and established by several actions ; and now he has obtained from the Privy Council an extension of it for three years more.

Pemberton and *Follett*, for the respondents. What the appellant claims as new machinery is not new. The placing the rollers at $2\frac{1}{2}$ inches' distance is not new ; they have been placed nearer in cotton-spinning. They have always varied in distance according to the length of the fibre of the substance to be spun. Suppose the macerating of the flax is new, then the patent ought to be taken out for that only, and not for two processes, one of which is not new. If part of the invention claimed fails the patent for the whole is void. The appellant does not claim anything in respect of the macerating process, which he says is now unneces-

sary ; he claims for the machinery for spinning, which, not being new, cannot be the subject of a patent.

Lord COTTENHAM, L. C. In this case the plaintiff complains of the defendants having infringed his patent, and of the course which has been taken below ; one, certainly, not of very ordinary occurrence, as your lordships will see when I call your attention to the mode in which the case was disposed of in the course of the proceedings. The bill sets forth the letters patent and specification, and states that the invention was in respect of machinery for preparing and spinning flax, hemp and other fibrous substances. It states the specification, and then states that the first process—namely, that of macerating the flax—had to a considerable degree become unnecessary. It then complains of what the defendants have done, not as interfering with the plaintiff's patent as regards the preparing of the flax for spinning, but as having invaded his patent so far as it was for an improved machinery for drawing and spinning flax ; which machinery for drawing and spinning flax is stated to have been in use and very generally adopted. That is the complaint made by the bill, to which the defendants pleaded, and by their pleas thus raised two objections to the plaintiff's title. The first objection was “that the plaintiff had not before, and at the time of the making of the letters patent in the bill mentioned, found out and invented any new and improved machinery, as in the said bill of complaint and in the said letters patent and specification is alleged.”

That objection therefore was that the patent was bad, because the invention described in the letters patent and specification was not new, that there was not any novelty in it—alluding to the rule of law that if any part of that which is claimed as a new invention was not in fact new, the patent would be bad. First of all, upon the construction of this plea, I cannot entertain a doubt that the terms “any new and improved machinery, as in the said bill of complaint and the said letters patent and specification is alleged,” are to be construed as meaning any such ma-

chinery as is there alleged, and in respect of which the patent is claimed ; but I apprehend that that does not now come before your lordships for decision.

The two pleas having been set down for argument, an issue was directed, which was afterward tried. No judgment was pronounced on the validity of the pleas, the parties having, although it is not expressed in terms in the order, thought it expedient to proceed to the trial of the truth of the pleas, not obtaining or asking the judgment of the court as to the legality of the pleas, and as to how far they raised the important fact. They proceeded to a trial accordingly, and on the trial the jury found in favor of the novelty and of the usefulness of the invention ; but there was an endorsement on the postea. [His lordship read the endorsement, as already stated.] Now that endorsement, which is to be taken as part of the information which the court was to act upon as ascertained before the jury, states the various distances at which the rollers were placed in the ordinary spinning machines, and states as a fact, which cannot now be in dispute, "that before the granting of the patent, flax, hemp and other fibrous substances were spun with machines with slides, by which the reach was varied according to the length of the staple or fibre of the article to be spun." We have it therefore as a fact, now to be assumed as true, that spinning machines were constructed with rollers, the distances between which varied according to the substance to be spun.

Now, all the variation which the plaintiff introduced into the ordinary spinning machine, which he claims as his invention, is fixing the rollers at $2\frac{1}{4}$ inches' distance from each other ; and that he states is such an improvement to the ordinary spinning machine as entitles him to be protected from all the rest of the world against their using spinning machines with the rollers at that distance. It is not, as was argued at the bar, one invention—namely, the macerating the flax, and using the flax so macerated with a particular machine. The earlier part of the invention he not only does not claim as against the defendants, but does not complain of the defendants as having used that which,

in point of fact, it is quite clear they did not so use ; and in point of fact it is quite clear that he has not adopted that mode.

Another mode has been adopted of macerating the flax, and the flax so macerated by another process has been used in a machine with rollers at the distance of $2\frac{1}{4}$ inches.

If the patent be good so far as the spinning machine is concerned—that is to say, if the plaintiff has a right to tell the defendants and all the rest of the world that they shall not use the common spinning machines with rollers at $2\frac{1}{4}$ inches' distance, then the existence of the patent deprives the defendants and all the rest of the world of the right of using the ordinary spinning machine in the form in which they had a right to use it before the patent was granted. That is not the object of the patent ; if he has discovered any means of using the spinning machine which the world had not known before, the benefit of that he has a right to secure to himself by means of a patent ; but if this mode of using the spinning machine was known before—and the endorsement upon the postea states that it was known before—then the plaintiff cannot deprive them of having the benefit of that which they enjoyed before. The endorsement on the postea stating that the rollers had been used at a variety of distances (not precisely specifying $2\frac{1}{4}$ inches, but stating that the distances had been made to vary according to the length of the fibre to be spun), appears to me to establish a fact which is of itself conclusive against the plaintiff. Some question was raised at the bar as to whether the effect of the maceration was to shorten the fibre ; there is no very distinct evidence on the subject, but upon referring to what has taken place in the court below, it does not appear that any doubt existed that the effect of the maceration was to detach one fibre from another ; the substance consisting of a variety of fibres of the length of $2\frac{1}{4}$ inches each, which, when combined, constituted a compound fibre of considerable length, but when detached by means of maceration by the application of moisture, then each individual fibre was reduced to the length of $2\frac{1}{4}$ inches. It does not appear to me, however, that this case

can depend upon this circumstance, because the real use of the spinning machine, before that process of maceration was introduced, was this : a machine for spinning with rollers at any distance at the option of the party using it or according to the substance to be spun ; and any substance might be spun that was capable of being so spun with rollers at $2\frac{1}{4}$ inches' distance, because the fibre was of that length or for any other reason ; that is quite immaterial. The question is whether it is an innovation the placing the rollers at $2\frac{1}{4}$ inches' distance from each other ; but by the endorsement on the postea we are told that the distance between the rollers varied according to the length of the fibre of the substance to be spun. Under these circumstances, the case now being reduced simply to the question whether the construction proposed by the patent is an improvement of the spinning machine, it appears to me that the judgment of the Court of Common Pleas is well founded, confined as it is now to that point, and that such a patent is not valid in point of law. Some objection was made to the course which was adopted in sending the case ; that is to say, to the terms in which the case was sent. It appears there is no question that the parties below were willing to adopt the terms proposed in order to put an end to the litigation, and that the court therefore sent a case embracing the right of the parties—namely, the validity of the patent, confined to the particular point raised. That of itself would be an answer to the objection now made to the form in which the case was sent, because this House will not permit parties on appeal to raise an objection which they did not think proper to raise before, and on which they did not obtain the judgment of the court below.

But even independently of that consideration, although the terms of the question for the Court of Common Pleas are as to the validity of the patent, you must take the whole case together ; you have the facts stated which raise the objections to the validity of the patent, which are contained in the pleas ; and these facts are confined to the question of novelty and to the question of usefulness. In point of fact, therefore, although the terms in which the

question is couched are larger than the plea, it is the very same question which was raised before his lordship the Master of the Rolls—and that was the question on which the judgment of the Court of Common Pleas was pronounced. It does nothing more than establish this proposition, that the objection taken to the patent—namely, that it was not new and not useful (novelty is the question rather on which it turned), is a good objection ; and that the patentee has failed to show that that for which alone he has claimed the patent is any novelty and entitles him to the benefit of a patent.

Lord BROUGHAM concurred.

Ordered that the appeal be dismissed, with costs, and that the orders and proceedings complained of be affirmed.

GIBSON v. BRAND.

Common Pleas, N. P., Trin. V., 1841.

(1 Web. P. C. 627.)

Prior Publication. Experiment. Infringement. Requisites of Specification.

While a man may publish to the world that which is perfectly new in all its use and has not before been enjoyed, yet he may not be the first and true inventor ; he may have borrowed it from some other person, he may have taken it from a book, he may have learnt it from a specification ; in which case his patent for it will be void.

It is not, however, sufficient to destroy the patent to show that learned persons in their studies had foreseen or had found out the same discovery, afterward made public, or that a man in his private warehouse had by various experiments endeavored to discover it and failed, and had given it up.

If the defendants sold an article of exactly the same fabric, made in the same manner as that for which the patent was taken out, such sale may be considered as a using of the invention and an infringement of the patent.

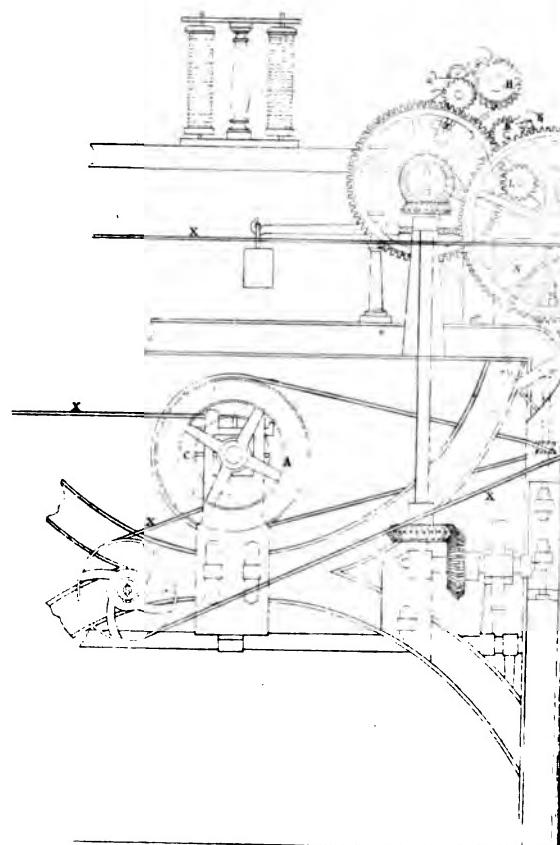
In framing the specification, the objects of the invention and the means whereby those objects are to be attained should be kept distinct.

Case for infringement.

The patent was granted to John Gibson and J. G. Camp-



FIG. I.



Inches.

A.D. 1836 N° 7228.

Manufacture of Silk, and Silk with other Fibrous Substances.

GIBSON & CAMPBELL'S SPECIFICATION AND DISCLAIMER.

SPECIFICATION.

NOW KNOW YE, that in compliance with the said proviso, I, the said John Gibson, on behalf of myself, and also of the said John Gordon Campbell, do hereby declare that the nature of our Invention consists,—

First, in a part of our process by which we discharge the gum from that peculiar kind of silk denominated silk waste, when the same is in the state of the sliver or rove.

Second, in a part of our process by which we dye silk waste, when in the state of sliver or rove.

Third, in a part of our process by which we spin yarn from dressed or heckled silk waste of long fibres, either in the gum or discharged.

Fourth, in a part of our process by which yarn from silk waste with long fibres may be spun in combination with flax of a similar length of fibre.

Fifth, in a part of our process, by which yarn from silk waste with long fibre is spun in combination with wool.

Sixth, in the application of our improved process to the throstle machine, on the principle of the long ratch, for the new and useful purpose of spinning silk waste.

Seventh, in certain improvements effected by us in the

Gibson & Campbell's Improvements in the Manufacture of Silk, &c.

throstle machine, by which its utility in spinning silk waste is greatly augmented.

Eighth, in the application of water to silk waste with long fibres in the process of spinning with the long ratch.

Having thus explained the nature or leading characteristics of our Invention, it is desirable, before we enter into the practical details of them, to give a brief outline of the methods heretofore adopted for spinning yarn from silk waste. Silk wastes differ considerably with respect to quality and cleanliness, and they are generally in a ravelled state. To free them from naps and other refuse matters, and to clear the ravelings they are first submitted to the action of a machine called a breaker, for the purpose of breaking or clearing out the more stubborn or knotty ravelings. The waste is next put under the operation of the dressing machines to be farther unravelled and cleared from naps and other impurities, which process also straightens the filaments, and causes them to lie evenly together, resembling in this respect heckled flax, although the fibres of the latter usually possess more uniformity as to length. This process of dressing is applicable to silk waste, either in the gum or discharged ; the former, however, is more easily dressed, contains less refuse, and is generally of a better quality. The third process upon the ordinary plan is to take the dressed silk to the cutting machine, where it is cut into lengths of about two inches, a little more or less, according to circumstances. If the silk waste that has been thus cut be in the gum, it is next discharged, and afterwards dried. The silk having become matted in the discharging process, the fibres of it are next opened up by a scutching machine or other similar apparatus before it undergoes the process of carding. When carded, the roving is prepared by a similar engine to that used for cotton, and it is spun on the mule jenny, which is on a similar principle to that of the cotton jenny.

Having thus explained the old or ordinary process of converting silk waste into yarn, I will proceed to describe our

Gibson & Campbell's Improvements in the Manufacture of Silk, &c.

novel process by which we produce our new or improved manufacture of yarn or thread. The silk waste having been dressed in the usual way, or in any other manner that may be found more advantageous (such as heckling or otherwise), either discharged or in the gum, we submit it to the drawing, roving, and spinning machinery, thereby entirely obviating the supposed necessity of cutting or shortening the filaments of silk waste, a destructive process which has heretofore been considered as an indispensable sacrifice, in order to convert it into yarn or thread. The kind of machinery we have found to answer best for the drawings and rovings of dressed, heckled, or carded silk waste, of long fibres, is the same as that used by flax spinners, and we adopt the same methods as are practised by them with long or cut line flax. The silk is first submitted to the spreading or first drawing machine, the slivers obtained from which are doubled and applied to the second drawing, and in like manner to the third drawing machine, and finally to the roving machine. The number of doublings and drawings requisite will depend upon the kind of silk used, which every competent manufacturer will know how to determine and arrange.

It may be proper to observe that there are several kinds of flax drawing and roving machines, and as they are in common use for flax and tow, no description of them is necessary, and it will therefore be sufficient to distinguish them by their names of circular, spiral, and sheet or chain. Cut line flax and tow drawing and roving machines are made either on the circular or spiral plans. The sheet or chain is also made for cut line flax, but not for tow. The drawing and roving machines that we have found to answer best are those which are made on the spiral plan, as the gills or heckles of these come closer to the nip of the drawing roller than in either of the other plans, and thereby enables the short filaments of the silk to be drawn and distributed more uniformly with the long fibres than if the said heckles or gills were more remote from the drawing

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roller. For the longest fibres of dressed or heckled silk waste, we employ what is designated by flax spinners long line preparation ; for the medium length of fibres of dressed, heckled, or carding silk, cut line, and for the shorter lengths tow preparation.

We have already noticed that the roving from silk waste may be made either when in the gum or discharged, and that the said rovings may be spun to suit the particular kind of goods to which yarn or thread is to be applied, but as there is a much greater demand for silk yarn discharged than in the gum, we usually discharge the gum from the sliver obtained by the first drawing or spreading machine. For this purpose the sliver is put into hanks of about half a pound each, then each of these hanks is put into a little bag made of an open fabric, such as thin canvas ; a quantity of these are collected (according to the dimensions of the boiler), put into the vessel, and discharged or "boiled off" in the usual manner. After this, the hanks still contained in the bags are to be well washed to free them from the deposition of the glutinous matter, or the presence of soap, alkali, or other impurities. The silk is now to be taken out of the bags with care, and after being thoroughly dried the hanks are to be put upon swifts, and after finding the end of the sliver it is to be coiled into cans, or it may be wound on bobbins, or otherwise disposed of, as may be convenient. The next operation upon these slivers consists in submitting them to the drawing machines, whereby the required number of drawing and doublings are to be given ; and finally, the roving is formed as already mentioned. The process of boiling or discharging gum silk we sometimes apply after it has been formed into roving. In this case the roving is to be reeled from the bobbins into hanks of about half a pound weight each ; these be put into bags, and the discharging conducted by the same process as that described with respect to the sliver. The discharged roving is next to be wound on bobbins preparatory to spinning, but we give the preference to the

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roving made from silk which has been discharged in the sliver.

Another improvement in our process or manufacture consists in dyeing the silk before it is spun into yarn or thread, and we find that this operation is best performed after it has been discharged and washed, and in the form of the sliver, as already described. After dyeing, the silk undergoes repeated doublings and drawings, and is finally made into roving in the same manner and by the same mechanism as are employed with the undyed silk. The process of dyeing is also applied by us to silk which has been discharged previous to its being dressed or heckled, and we usually dye it in the hanks obtained from the sliver of the first drawing. The process of dyeing may also be applied to the rove, which is to be reeled from the bobbins into hanks of a size and weight the most convenient to the dyer. After dyeing it is to be wound upon bobbins previous to being spun, but we prefer the roving which has been made from the silk dyed in the sliver. Care must be taken that the silk, whether dyed or undyed, be properly dried prior to its being submitted to any of the processes of drawing, roving, and spinning. The advantages obtained in this part of our Invention, of dyeing the silk previous to its being spun into yarn or thread, consists in the certainty that the coloring matter will reach every fibre, and consequently produce a more uniform and perfect dyeing. We also find that a superior lustre is obtained by our mode over that wherein the silk is dyed subsequent to being spun, which effect we consider to be caused by the violent action upon the silk by the dyer's process, by which many of the fibres are broken and started from their parallel positions with respect to each other, thereby destroying the wiry and lustrous appearance of the yarn or thread.

For making rove from silk waste of long fibres and flax combined, and from silk waste of long fibres and wool combined, we employ the same machinery throughout as we do for making rove from silk waste alone. The proportions

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of silk waste to that of flax, and of silk waste to that of wool, are varied according to the particular manufacture to which the yarns are to be applied. The method we have adopted is to obtain slivers of flax or wool from the spreading or first drawing machine. The number of slivers of flax or of wool to that of silk obtained from the first drawings are regulated in the second drawings in proportions suitable for the peculiar descriptions of yarn required.

Having now explained the nature of the drawings and roving machinery which we have found to answer best, and the several processes of drawing and roving silk waste alone, and of silk waste in combination with wool and with flax, I will proceed to describe the spinning machine by which the rove is drawn or elongated into strands to be spun into yarn or thread. The annexed Drawings for the most part represent the well-known spinning frame, called a throstle, on the principle of the long ratch, as employed in the spinning of flax, which machine, combined with the improvements we have applied to it, we apply to the new and useful purpose of spinning silk waste of long fibres into yarn or thread from rove, either in the gum or discharged, or dyed as before mentioned, and also from rove made from silk waste of long fibres in combination with flax or with wool.

Figure 1 in the Drawings exhibits a front elevation of a portion of the throstle frame, the parts not introduced being only a repetition or extension of the same kind of mechanism, which is well understood by spinners.

Figure 2 is an elevation at right angles to that represented in Fig. 1, and shows only about half the machine, the other half corresponding in its arrangements therewith.

Figure 3 exhibits a plan of the retaining rollers, of which the elevation is given in Figure 1.

Figure 4 represents the pressing roller separately viewed, and of double the linear measurement it occupies in Fig. 1, in order to show it the more distinctly.

Figures 5 and 6 are front and side views of the guides by

which the rove is conducted to the nip of the brass bosses of the drawing roller, also drawn to double the scale of Figure 1.

In all these Figures, where the same letters of reference occur, they indicate the same parts though differently viewed.

A, A', in Figures 1 and 2, represent a fast and loose pulley ; the latter receives the power from the prime mover, and through the medium of its axis actuates another pulley C, which, by means of an endless strap X, X, puts in motion the pulleys D and B. From the latter motion is imparted to the twist pinion E, which actuates the wheel F, and conveys the differential motion (not introduced into the Drawing) to the drawing roller G, and the retaining rollers H, H, H, also the intermediate or carrying rollers K and L, and to the traverse motion M. At N is a copper trough containing water, the application of which in this process is an important feature in our Invention. O, O, O, are pressing rollers which are made of wood, and are partly immersed in the water wherein they rotate, and by their continuous action convey the fluid to the nip of the brass bosses P, P, P, of the drawing roller G, thereby saturating the filaments of silk with the fluid while they are in the act of being drawn down and elongated into strands from the roving, to be spun into yarn or thread by means of the spindles and flyers Q, Q, Q, which for our new process we place (as will be observed in the Drawing) much nearer to the drawing roller G than has heretofore been practised. R, R, are copper guides ; the construction of these is best seen in the separate views of them given in Figures 5 and 6, on a greater scale. S, S, S, are mahogany top rollers. The other parts of the machine not adverted to being quite familiar to persons employed in this branch of manufacture, it will be unnecessary to explain.

Our application of the brass bosses P, P, to the drawing roller G, together with the application of water, we have found to be an important improvement in the spinning of

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silk waste, whether dyed or undyed, as the brass preserves the silk from stains which occur when iron is used. It will be observed that neither the brass bosses P nor the pressing rollers O are fluted, which fluting we have found to be unnecessary in spinning silk waste of long fibres with the ratch corresponding in length thereto. Great advantages also result from employing the throstle frame instead of the mule jenny for spinning silk waste. In the first place, a great saving is made in the cost of production by obviating the necessity of operatives at high wages. In the second place, by using a long ratch corresponding to the length of the fibres to be spun, yarn or thread is obtained not only of very superior strength, but it can be spun of very fine numbers, even as high as No. 200 or upwards, on the cotton scale, a result quite unprecedented in spinning by the throstle. The application of water to the silk, communicated by means of the pressing roller, not only toughens the fibres, but gives them a greater tenacity or adhesiveness to each other, enabling them to sustain the action of being spun, besides communicating a greater degree of flexibility, which facilitates or induces the ends of the fibres to adhere or incorporate more readily with the yarn. Likewise, owing to the short distance between the top of the spindle and the nip of the bosses of the drawing or delivering roller, the yarn is subjected to less vibration and can be spun to finer numbers than with the spindles at a greater distance. The silk yarn thus produced has a smooth wiry appearance, and when spun with but little twist the natural lustre of the silk fibres is preserved, and it approximates in appearance to tram or organzine silk. The spinning frame just described is also applicable to the spinning of silk and flax combined, as well as to the spinning of a combination of silk and wool, in each case varying the sliding ratch to suit the lengths of the fibres to be spun.

Having now given the necessary details of the manner in which our Invention is to be performed, we desire it to be understood that we disclaim those parts of the process or

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mechanism which were or may have been previous to the granting of our Patent well known or in use for the same purposes ; but we restrict our claims to the eight several heads of Invention mentioned in the early part of this Specification, all of which we believe to be new and of great public utility.

In witness whereof, I, the said John Gibson, have hereunto set my hand and seal, this Seventeenth day of May, in the year of our Lord One thousand eight hundred and thirty-seven.

JOHN (L.S.) GIBSON.

DISCLAIMER.**DISCLAIMER AND MEMORANDUM OF ALTERA-**

TION proposed to be entered by the said John Gibson and John Gordon Campbell with the Clerk of the Patents of England, pursuant to an Act passed in the fifth and sixth year of the reign of His late Majesty King William the Fourth, entitled "An Act to amend the Law touching Letters Patent for Inventions."

NOW KNOW YE, that in compliance with the said proviso, I, the said John Gibson, on behalf of myself, and also of the said John Gordon Campbell, do hereby declare that the nature of our said Invention consists,—

First, in a part of our process by which we discharge the gum from that peculiar kind of silk denominated silk waste when the same is in the state of the sliver or rove.

Second, in a part of our process by which we dye silk waste when in the state of sliver or rove.

Third, in a part of our process by which we spin yarn from dressed or heckled silk waste of long fibres, either in the gum or discharged.

Fourth, in a part of our process by which yarn from silk waste with long fibres may be spun in combination with flax of a similar length of fibre.

And, fifth, in a part of our process by which yarn from silk waste with long fibre is spun in combination with wool.

~~Sixth, in the application of our improved process to the throstle machine, on the principle of the long ratch, for the new and useful purpose of spinning silk waste.~~

~~Seventh, in certain improvements effected by us in the throstle machine, by which its utility in spinning silk waste is greatly augmented.~~

~~Eighth, in the application of water to silk waste with~~

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~~long fibres in the process of spinning with the long ratch.~~

Having thus explained the nature or leading characteristics of our Invention, it is desirable, before we enter into the practical details of them, to give a brief outline of the methods heretofore adopted for spinning yarn from silk waste. Silk wastes differ considerably with respect to quality and cleanliness, and they are generally in a ravelled state. To free them from naps and other refuse matters, and to clear the ravelings, they are first submitted to the action of a machine called a breaker, for the purpose of breaking or clearing out the more stubborn or knotty ravelings. The waste is next put under the operation of the dressing machines, to be farther unravelled and cleared from naps and other impurities, which process also straightens the filaments, and causes them to lie evenly together, resembling in this respect heckled flax, although the fibres of the latter usually possess more uniformity as to length. This process of dressing is applicable to silk waste either in the gum or discharged. The former, however, is more easily dressed, contains less refuse, and is generally of a better quality.

The third process, upon the ordinary plan, is to take the dressed silk to the cutting machine, where it is cut into lengths of about two inches, a little more or less, according to circumstances. If the silk waste that has been thus cut be in the gum, it is next discharged, and afterwards dried. The silk having become matted in the discharging process, the fibres of it are next opened up by a scutching machine or other similar apparatus before it undergoes the process of carding. When carded the roving is prepared by a similar engine to that used for cotton, and it is spun on the mule jenny, which is on a similar principle to that of the cotton jenny.

Having thus explained the old or ordinary process of converting silk waste into yarn, I will proceed to describe our novel process by which we produce our new—or improved

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manufacture of yarn or thread. The silk waste having been dressed in the usual way, or in any other manner that may be found more advantageous (such as heckling or otherwise), either discharged or in the gum, we submit it to the drawing, roving, and spinning machinery, thereby entirely obviating the supposed necessity of cutting or shortening the filaments of silk waste, a destructive process, which has heretofore been considered as an indispensable sacrifice in order to convert it into yarn or thread. The kind of machinery we have found to answer best for the drawings and rovings of dressed, heckled, or carded silk waste of long fibres is the same as that used by flax spinners, and we adopt the same methods as are practised by them with long or cut line flax. The silk is first submitted to the spreading or first drawing machine, the slivers obtained from which are doubled and applied to the second drawing, and in like manner to the third drawing machine, and finally to the roving machine. The number of doublings and drawings requisite will depend upon the kind of silk used, which every competent manufacturer will know how to determine and arrange. It may be proper to observe, that there are several kinds of flax drawing and roving machines, and as they are in common use for flax and tow, no description of them is necessary, and it will therefore be sufficient to distinguish them by their names of circular, spiral, and sheet or chain. Cut line flax and tow drawing and roving machines are made either in the circular or spiral plans. The sheet or chain is also made for cut line flax, but not for tow. The drawing and roving machines that we have found to answer best are those which are made on the spiral plan, as the gills or heckles of these come closer to the nip of the drawing roller than in either of the other plans, and thereby enables the short filaments of the silk to be drawn and distributed more uniformly with the long fibres than if the said heckles or gills were more remote from the drawing roller. For the longest fibres of dressed or heckled silk waste we employ what is designated

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by flax spinners long line preparation ; for the medium lengths of fibres of dressed, heckled, or carded silk, cut line ; and for the short lengths tow preparations.

~~We have already noticed that~~ The roving from silk waste may be made either when in the gum or discharged, and that the said rovings may be spun to suit the particular kind of goods to which yarn or thread is to be applied ; but as there is a much greater demand for silk yarn discharged than in the gum, we usually discharge the gum from the sliver obtained by the first drawing or spreading machine. For this purpose the sliver is put into hanks of about half a pound each, then each of these hanks is put into a little bag made of an open fabric, such as thin canvas. A quantity of these are collected (according to the dimensions of the boiler), put into the vessel, and discharged or "boiled off" in the usual manner. After this the hanks still contained in the bags are to be well washed to free them from the deposition of the glutinous matter, or the presence of soap, alkali, or other impurities. The silk is now to be taken out of the bags with care ; and after being thoroughly dried, the hanks are to be put upon swifts, and after finding the end of the sliver it is to be coiled into cans, or it may be wound on bobbins, or otherwise disposed of as may be convenient. The next operation upon these slivers consists in submitting them to the drawing machines, whereby the required number of drawings and doublings are to be given, and, finally, the roving is formed as already mentioned. The process of boiling or discharging gum silk we sometimes apply after it has been formed into roving. In this case the roving is to be reeled from the bobbins into hanks of about half a pound weight each ; these *are to* be put into bags, and the discharging conducted by the same process as that described with respect to the sliver. The discharged roving is next to be wound on bobbins preparatory to spinning ; but we give preference to the roving made from silk, which has been discharged in the sliver.

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Another improvement in our process or manufacture consists in dyeing the silk before it is spun into yarn or thread ; and we find that this operation is best performed after it has been discharged and washed, and in the form of the sliver, as already described. After dyeing the silk undergoes repeated doublings and drawings, and is finally made into roving in the same manner and by the same mechanism as are employed with the undyed silk. The process of dyeing is also applied by us to silk which has been discharged previous to its being dressed or heckled, and we usually dye it in the hanks obtained from the sliver of the first drawing. The process of dyeing may also be applied to the rove which is to be reeled from the bobbins into hanks of a size and weight the most convenient to the dyer. After dyeing it is to be wound upon the bobbins previous to being spun ; but we prefer the roving which has been made from silk dyed in the sliver. Care must be taken that the silk, whether dyed or undyed, be properly dried prior to its being submitted to any of the processes of drawing, roving, and spinning. The advantages obtained in this part of our Invention of dyeing the silk previous to its being spun in yarn or thread consist in the certainty that the coloring matter will reach every fibre, and consequently produce a more uniform and perfect dyeing. We also find that a superior lustre is obtained by our mode over that wherein the silk is dyed subsequent to being spun, which effect we consider to be caused by the violent action upon the silk, by the dyer's process, by which many of the fibres are broken and started from their paralleled positions with respect to each other, thereby destroying the wiry and lustrous appearance of the yarn or thread. For making rove from silk waste of long fibres and flax combined, and from silk waste of long fibres and wool combined, we employ the same machinery throughout as we do for making rove from silk waste alone. The proportions of silk waste to that of flax, and of silk waste to that of wool, are varied according to the particular manufacture to which the yarns

are to be applied. The method we have adopted is to obtain slivers of flax or of wool from the spreading or first drawing machine. The number of slivers of flax or of wool to that of silk slivers obtained from the first drawings are regulated in the second drawings in proportions suitable for the peculiar description of yarn required.

Having now explained the nature of the drawing and roving machinery which we have found to answer best, and the several processes of drawing and roving silk waste alone, and of silk waste in combination with wool and with flax, I will proceed to describe the spinning machine by which the rove is drawn or elongated into strands, to be spun into yarn or thread.

The annexed Drawings for the most part represent the well-known spinning frame called a throstle, on the principle of the long ratch, as employed in the spinning of flax, which machine ~~combined with the improvements we have applied to it~~ we apply to the new and useful purpose of spinning silk waste of long fibres into yarn or thread from rove, either in the gum, or discharged, or dyed, as before mentioned, and also from rove made from silk waste of long fibres in combination with flax or with wool.

Figure 1 in the Drawings exhibits a front elevation of a portion of the throstle frame, the parts not introduced being only a repetition or extension of the same kind of mechanism which is well understood by spinners.

Figure 2 is an elevation at right angles to that represented in Figure 1, and shews only about half the machine, the other half corresponding in its arrangement therewith.

Figure 3 exhibits a plan of the retaining rollers, of which the elevation is given in Figure 1.

Figure 4 represents the pressing roller separately viewed, and of double the linear measurement it occupies in Figure 1, in order to shew it the more distinctly.

Figures 5 and 6 are front and side views of the guides by which the rove is conducted to the nip of the brass bosses

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roller, also drawn to double the scale of

figures, where the same letters of reference indicate the same parts, though differently

Figures 1 and 2, represent a fast and a loose roller receives the power from the prime mover, by medium of its axis actuates another pulley by means of an endless strap X, X, puts in wheels D and B. From the latter motion is derived by the twist pinion E, which actuates the wheel F giving differential motion (not introduced into the drawing roller G, and the retaining rollers, which are made of wood, and partly of water, wherein they rotate, and by their motion convey the fluid to the nip of the brass roller of the drawing roller G, thereby saturating the silk with the fluid while they are in the act of drawing it down and elongated into strands from the which are run into yarn or thread, by means of the rollers Q, Q, Q, which for our new process we have observed in the Drawing) much nearer to the roller G than is usually has heretofore been done. R, are copper guides, the construction of which is given in the separate views of them given in figures 1 and 2 on a greater scale. S, S, S, are mahogany blocks, the other parts of the machine not adverted to being familiar to persons employed in this branch of the manufacture, it will be unnecessary to explain. The brass bosses P, P, to the drawing roller with the application of water, we have introduced an important improvement in the spinning of silk whether dyed or undyed, as the brass preserves

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In all these Figures, where the same letters of reference occur, they indicate the same parts, though differently viewed.

A, A, in Figures 1 and 2, represent a fast and a loose pulley ; the latter receives the power from the prime mover, and through the medium of its axis actuates another pulley C, which, by means of an endless strap X, X, puts in motion the pulleys D and B. From the latter motion is imparted to the twist pinion E, which actuates the wheel F and conveys the differential motion (not introduced into the Drawing) to the drawing roller G, and the retaining rollers H, H, H, also the intermediate or carrying rollers K and L, and to the traverse motion M. At N is a copper trough containing water, the application of which in this process is an important feature in our invention. O, O, O, are pressing rollers, which are made of wood, and partly immersed in the water, wherein they rotate, and by their continuous action convey the fluid to the nip of the brass bosses P, P, P, of the drawing roller G, thereby saturating the filaments of silk with the fluid while they are in the act of being drawn down and elongated into strands from the roving to be spun into yarn or thread, by means of the spindles and flyers Q, Q, Q, which for our new process we place (as will be observed in the Drawing) much nearer to the drawing roller G than is usually has heretofore been practised. R, R, are copper guides, the construction of which is best seen in the separate views of them given in Figures 5 and 6 on a greater scale. S, S, S, are mahogany top rollers. The other parts of the machine not adverted to being quite familiar to persons employed in this branch of manufacture, it will be unnecessary to explain.

Our application of The brass bosses P, P, to the drawing roller G, together with the application of water, we have found to be an important improvement in the spinning of silk waste, whether dyed or undyed, as the brass preserves

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the silk from stains, which occur when iron is used. It will be observed that neither the brass bosses P nor the pressing rollers O are fluted, which fluting we have found to be unnecessary in spinning silk waste of long fibres, with the ratch corresponding in lengths thereto. Great advantages also result from employing the throstle frame instead of the mule jenny for spinning silk waste. In the first place a great saving is made in the cost of production by obviating the necessity of operatives at high wages ; in the second place by using a long ratch, corresponding to the length of fibres to be spun, yarn or thread is obtained not only of very superior strength, but it can be spun to very fine numbers, even as high as No. 200 or upwards on the cotton scale, a result quite unprecedented in spinning by the throstle. The application of water to the silk, communicated by means of the pressing roller, not only toughens the fibres, but gives them a greater tenacity or adhesiveness to each other, enabling them to sustain the action of being spun, besides communicating a greater degree of flexibility, which facilitates or induces the ends of the fibres to adhere or incorporate more readily with the yarn. Likewise, owing to the short distance between the top of the spindle and the nip of the bosses of the drawing or delivering roller, the yarn is subjected to less vibration, and can be spun to finer numbers than with the spindles at a greater distance. The silk yarn thus produced has a smooth wiry appearance, and when spun with but little twist the natural lustre of the silk fibres is preserved, and it approximates in appearance to tram or organzine silk. The spinning frame just described is also applicable to the spinning of silk and flax combined, as well as to the spinning of a combination of silk and wool, in each case varying the sliding ratch to suit the lengths of the fibres to be spun.

Having now given the necessary details of the manner in which our Invention is to be performed, we desire it to be understood that we disclaim those parts of the process or mechanism which were or may have been, previous to the

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granting of our Patent, well known or in use for the same purposes ; but we restrict our claims to the ~~eight~~ ^{five} several heads of Invention mentioned in the early part of this Specification, all of which we believe to be new and of great public utility.

In witness whereof, I, the said John Gibson, have hereunto set my hand and seal, this Seventeenth day of May, in the year of our Lord One thousand eight hundred and thirty-seven.

bell November 19, 1836, numbered 7,228, for "a new or improved process or manufacture of silk and silk in combination with certain other fibrous substances."

The specification was as follows :

"The nature of our said invention consists, 1. In a part of our process by which we discharge the gum from that peculiar kind of silk denominated silk waste, when the same is in the state of the sliver or rove. 2. In a part of our process by which we dye silk waste when in the state of sliver or rove. 3. In a part of our process by which we spin yarn from dressed or heckled silk waste of long fibres, either in the gum or discharged. 4. In a part of our process by which yarn from silk waste with long fibres may be spun in combination with flax of a similar length of fibre. 5. In a part of our process by which yarn from silk waste with long fibre is spun in combination with wool. 6. In the application of our improved process to the throstle machine, on the principle of the long ratch, for the new and useful purpose of spinning silk waste. 7. In certain improvements effected by us in the throstle machine by which its utility in spinning silk waste is greatly augmented. 8. In the application of water to silk waste with long fibres in the process of spinning with the long ratch.

"Having thus described the nature or leading characteristics of our invention, it is desirable, before we enter into the practical details of them, to give a brief outline of the methods heretofore adopted for spinning silk wastes. . . .

"Having now given the necessary details of the manner in which our invention is to be performed, we desire it to be understood that we disclaim those parts of the process or mechanism which were or may have been, previous to the granting of our patent, well known or in use for the same purposes, but we restrict our claims to the eight several heads of invention mentioned in the early part of this specification, all of which we believe to be new and of great public utility."

The declaration, after the usual averments, assigned as a breach "that the defendant directly or indirectly made,

used and put in practice the said invention, and every part thereof, and therein counterfeited, imitated and resembled the same, and every part thereof."

The defendant pleaded, 1. Not guilty. 2. That the plaintiffs were not the true and first inventors of the alleged invention. 3. That the said invention was not a new invention. 4. That the said invention was and is of no use, benefit and advantage to the public. 5. That the said instrument in writing was and is as follows (setting it out); that no other was enrolled; and averring that the said instrument in writing does not particularly describe and ascertain the nature of the said invention, and in what manner the same is to be performed. Upon these pleas issues were joined, the replication to the fifth plea being that the said instrument in writing, in that plea set forth, does particularly describe and ascertain the nature of the said invention, and in what manner the same was and is to be performed. No question turned upon the notice of objections.

Pollock, Bompas, Hill, Hoggins and Corrie were counsel for the plaintiffs; *Follett, Kelly, Channell and Henderson*, for the defendant. The following portion of the summing up of the learned judge will sufficiently explain the principal features of the case.

TINDAL, C. J., to the jury. This is an action for the infringement of letters patent granted to the plaintiffs, and the defendant first says that he has not been guilty of any infringement, and that before he can be called upon for answer the plaintiffs must satisfy you that the defendant has in some mode or other infringed this patent. The defendant next says that these letters patent have not been granted to the true and first inventors, which you are aware is a condition required by the statute. Now, a man may publish to the world that which is perfectly new in all its use and has not before been enjoyed, and yet he may not be the first and true inventor; he may have borrowed it from some other person, he may have taken it from a book, he may have learnt it from a specification; and then the legislature never intended that a person who had taken all

his knowledge from the act of another, from the labors and assiduity or ingenuity of another, should be the man who was to receive the benefit of another's skill. There is some distinction, although perhaps not a very broad one, between the plea which alleges the plaintiffs were not the first and true inventors, and that on which I conceive the principal question between the parties will turn, the third in order, viz., whether the subject-matter of this patent was known in England at the time the letters patent were granted. It is quite clear, if on the evidence you have heard you are satisfied that this which is alleged to be a discovery by the plaintiffs had been publicly known and practised in England, there is an end to the validity of the patent. It would not be sufficient to destroy the patent to show that learned persons in their studies had foreseen or had found out this discovery that is afterward made public, or that a man in his private warehouse had by various experiments endeavored to discover it and failed, and had given it up. But if you perceive on the evidence that the thing which is now sought to be protected by the patent has been used, and for a considerable period, and used so far to the benefit of the public as to be sold to anybody that thought proper to purchase it of those who made it, then it becomes a material question whether such mode of user was not in your judgment a public using of the article, of the process or of the invention, before the letters patent were granted, and therefore you will apply the evidence when you come to it, subject to such an explanation, not giving a force or efficacy to any attempts that have been made toward the discovery which the plaintiffs set up, but which have failed and been abandoned, and rested indeed only in experiment, but at the same time giving full effect to such evidence as has been brought before you that tends to show that, by other persons on various occasions, the article has been made and the process been pursued which is now sought to be protected, and has been sold to such of the public as have thought proper to come forward and purchase.

Then the defendant says the invention is of no utility ; but it does not appear to me that can, on the present occa-

sion, afford you any considerable trouble. No doubt there is evidence enough to show that the result of this process does produce an article that is of considerable beauty and value ; the demand that is made for it, indeed, would seem to establish that.

Then the defendant objects to the specification. I should tell you, as far as there are any objections in point of law to the specification, I do not propose to trouble you with them on this occasion ; all that I mean to leave to you is the question of fact that is raised for your determination—namely, whether it is so worded and such explanations are given in it that a person of a sufficient degree of understanding on the particular subject could carry the provisions of the specification into effect and obtain the proposed result. The specification ought to be so clearly worded as to lead without any doubt or difficulty to that result, because it is the price that the man who takes out his patent pays to the public for their being so long kept out of the enjoyment of the commodity or manufacture that is protected ; the price he pays is that he will lodge such an account of his own discovery and invention as will enable the public at the expiration of the fourteen years to have as free and unreserved use of the invention as he himself. Therefore every man who is an honest man is bound to pay that price justly and fairly, and to word his specification, which he is obliged by the terms of the patent to enroll in the Court of Chancery, in such a way as to be clear from all doubt. Now, I cannot say that I think this a very clear specification ; I cannot read through these eight different heads, which I understand to be the eight different points that are sought to be protected by the patent, without thinking there has been a mixture rather of object and purpose or design, to which the party means to apply his patent, with that which is more strictly and properly the process by which the object is meant to be obtained ; the mixing them together and not keeping them separate and distinct tends very much to obscurity in the document itself.

The only person who proves the invasion of the patent is Rolleston, who says, "I bought the silk from the defend-

ants. They called it patent silk, and Mr. Miller, their manager, called it so to me ; and in the invoice it is written, patent fringe boiled off at 10*s.* 6*d.*" He says "it was yarn similar to that I bought at Mr. Campbell's, but 5*s.* cheaper in the pound ; it was not so good as what the patentees furnished. Campbell and Gibson's was always taken in preference to theirs if we had it in hand." You see what was actually produced, and it rests entirely on this man's evidence and on the affidavit put in by the plaintiffs that was made by the defendant, in which, in the Court of Chancery, he says he had been in the course for the last two years of using and making the silk which he was then selling, because it was done openly, and they had never taken any notice of it ; and also that he did not think that their patent was an available patent—not, in effect, denying that he was selling what was then manufactured, but defending it on the ground that it was not protected by the letters patent. Upon that you must say whether you are satisfied that the defendant has violated this patent at all. If they have themselves sold an article of exactly the same fabric, made in the same manner as that for which the patent was taken out, such sale may be considered as a using of the invention within the terms of the declaration, and so you would say, if you are satisfied on the evidence, by your verdict. Next, you must say whether the plaintiffs are the true and first inventors, and then whether this is a patent which has been taken out for a new manufacture ; that is, either for a new result or a new mode of obtaining a result, although it would be upon an old process and with new combination, and producing new results. Then comes the question of utility, about which you need hardly trouble yourselves ; and lastly, the question whether this specification is so worded, and with that accuracy of description, as to enable a person versed in the matter and of competent intelligence to perform the object of the patent.

The verdict was as follows : The jury are of opinion that the invention is not new, but an improved process—not a new combination ; that the defendant is guilty ; that the

invention is useful, and that the specification is sufficient.

TINDAL, C. J. The verdict will be for the plaintiff on the first, fourth and fifth issues; on the second and third issues there is the special finding, which the court must mould as well as they can.

The report of subsequent proceedings on motion for a nonsuit will be found under date Easter Term, 1842.

REQUISITES OF SPECIFICATION.—Specification must be such in case of a machine that mechanics may be able to make the machine by following directions without any new inventions or additions of their own, and without information from other sources; must fully disclose the invention and contain nothing materially false or defective; the insertion of more things than are requisite constitutes a fatal defect. *Rex v. Arkwright*, 1 *ante*, 29. Inventor not restricted to description by words only, but allowed to annex drawings. *Bloxam v. Elsee*, 1 *ante*, 373. Patent for combination of substances should name the substances. *Savory v. Price*, 1 *ante*, 366. Specification must state at least one method that will succeed. *Derosne v. Fairie*, 2 *ante*, 103. Specification must be such as may be followed without invention or addition. *Morgan v. Seaward*, 2 *ante*, 262. The most advantageous mode must be stated. *Morgan v. Seaward*, 2 *ante*, 262. Whether a word used in specification is the correct description of the thing is not important provided it describes the thing so that no man can doubt what it is. *Minter v. Mower*, 2 *ante*, 262.

WALTON *v.* POTTER.

Common Pleas, Nov. 18, 1841.

(1 Web. P. C. 597.)

*Patent for an Adaptation of a known Substance. Pleading.
Admissions in Pleading. Form of Verdict.*

The adaptation of a substance of known properties to a particular purpose may be the subject of a patent.

An invention of improvements in cards for carding wool, cotton, silk and other fibrous substances, and for raising the pile of woollen and other cloths by the application and adaptation of caoutchouc or india-rubber, as a substitute for the fillets or sheets of leather, is patentable.

Where the judge has left to the jury the specific issues raised on the record

and refused to put to them certain questions of fact suggested by the defendant's counsel, *held* no misdirection or ground for a new trial.

It appears such questions can only be asked with the consent of all parties, and the jury are not bound to answer them.

The plea that the invention is not a new manufacture known in England admits the invention to be a manufacture and puts in issue the novelty.

Matter stated in a plea as inducement to a specific allegation, upon which an issue in fact is taken, is not on the record for other purposes than the issue.

Rule to enter verdict for the defendants.

The proceedings in the court below are reported at p. 162.

Wilde, Bompas and *Addison* showed cause against a rule *nisi* obtained in Easter Term last by *Channell*, to enter a verdict for the defendants, or to arrest the judgment, or for a new trial on the grounds of misdirection and verdict against evidence.

The judgment was sought to be arrested on the ground that the invention was not the subject-matter of letters patent, being the application of a known substance to a purpose and in a manner well known, and it was contended on the part of the defendants that this objection was open to the defendants both under the third and fourth pleas. On the part of the plaintiff it was contended that this objection was not open to the defendants ; that the specification having been set out in the fourth plea as inducement to an allegation upon which an issue of fact had been taken and disposed of by the jury in favor of the plaintiff, the plea was altogether disposed of, and the defendants could not resort to the introductory matter for the purpose of raising an objection, which if intended to be raised should have been pleaded in a proper manner. That to admit of recourse being had to matter so stated as inducement would be a violation of the rule of pleading that matter not traversed in one plea was only admitted for the purposes of that plea.

The alleged misdirection was the refusal of the learned judge to leave certain specific questions to the jury in addition to the issues on the record.

TINDAL, C. J. I shall say but little in this case, because

it is, in effect, an appeal from the direction I gave to the jury on the trial of the cause, and I would much rather hear the opinions of my brethren upon that than rely much upon my individual judgment. I am bound, however, to state generally what the opinion I have formed is as to the effect of the verdict.

I take the motion to proceed, 1, upon the ground that the verdict of the jury upon the several pleas that were put upon the record is against the evidence; 2, that in the course and progress of the trial there was a misdirection on my part to the jury; and, 3, that on the face of the record itself there is that which shows the invention is not the subject-matter of a patent within the statute of James.

With respect to the first ground, the cause was debated at very considerable length and with great ability by the counsel on both sides, and I think there was scarcely a point that arose upon the evidence which was not submitted in its turn to the jury, according to the particular view which the respective counsel entertained of it. It was a case in which there was a considerable body of evidence on both sides, and the jury were to form upon the issues that were before them a just conclusion according to the preponderance of the evidence, and I see no reason whatever to be dissatisfied with the conclusion at which they arrived. They were first to say, upon the plea of not guilty, whether the mode which had been used by the defendants was virtually and substantially the same as that described in the plaintiff's specification—a mere matter of fact upon which they had the evidence of the plaintiff's and the defendants' witnesses, and they arrived at the conclusion that the defendants had borrowed their mode from that described in the plaintiff's specification.

Then, upon the two next pleas, the question that was specifically raised for their determination was whether this was a new invention or whether it was known before the time when the plaintiff obtained his patent, and they determined, as far as the public use was concerned, that it was new and not known in England before the date of that

patent ; and I see no reason for saying that after they had exercised their judgment upon it, and had the patent of Hancock fully explained to them, and arrived at that conclusion, we should set it aside and send the case to a new trial. Then there was only one other issue which is material, which was whether sheet cards and top cards were useful or not, according to the mode of adaptation described in the specification ; and upon that they also found their verdict for the plaintiff ; the evidence upon that point being of the actual user of sheet cards and top cards and the trial of experiments, though, perhaps, since the action was brought, yet still bearing upon the question—the same subject-matter which produced the same results. There being, therefore, on the part of the plaintiff, positive evidence that it would answer for the purpose of sheet cards and top cards, and on the part of the defendants nothing but judgment and belief that it would not, why are we to set the verdict aside ? Therefore, as far as that ground comes into consideration, I think the cause ought not to be sent back to another jury for the purpose of a second trial.

Then, was there any misdirection ? I take the grounds of misdirection, which have been pointed out in the course of the argument, to be these : 1. That two certain questions, which at the close of my summing up to the jury the learned counsel for the defendants wished me to ask the specific opinion of the jury upon, I declined putting to them ; and, 2. That I ought to have told the jury that, looking at the whole of the patent and the specification, this was not the subject-matter of a patent within the statute of James. With respect to the first point it appears, I think, almost to be admitted in argument that there was no necessity that I should put to the jury any specific questions which suggested themselves to the minds of the counsel. If they were points which I had overlooked in the course of my summing up, it would be very well to remind me of them, and to request that they should be put more pointedly than they had been in the course of such statement of the evidence to the jury ; but it is a very inconvenient thing indeed if, after the cause has been left to the

jury upon the specific issues raised upon the record, certain insulated questions should obtain specific answers, and come back to the court out of which the record proceeded. It may sometimes be very useful and necessary. In many cases where the jury may come to a decision upon a point upon two different grounds distinct from each other, and it does not appear what was passing in their minds, or whether they found their verdict on one ground or the other, with the consent of the parties, but not without, if the jury choose to give an answer to the question, it may be useful to ask whether they are satisfied that such a point was proved in the affirmative, or to answer some question according to the circumstances of the case upon which the verdict may turn ; but that is to be exercised, I think, very sparingly, because otherwise the counsel for the defendant may put his two questions, and the counsel for the plaintiff may put two more, and the consequence would be, not that a special verdict would be found by the jury, where all the facts would be before the court, the law being to be determined by it, but certain insulated facts, not embodying the whole, would be found by the jury, which might produce more intricacy and confusion rather than be a real and effectual help in ascertaining the points that were joined in issue between the parties. Therefore I cannot think, as at present advised, that I did improperly, or indeed unwisely, in declining at that period of the trial to leave these questions to the jury.

I come now to the second ground upon which it is contended that there was a misdirection. I am not prepared to deny—on the contrary, am ready to admit—that if there were an issue raised upon the record which involved the validity of the patent, I was bound to give my opinion, one way or the other, to the jury, that it was a void or a valid patent ; but looking at these issues I do not see any one which raises the question whether this was, in the sense in which it has been argued before us, a manufacture within the meaning of the statute of James ; that is, in effect, whether the invention is one for which, in point of law, a patent can be granted, as, for instance, whether it is a mere

abstract principle not embodied at all, or not involving any combination or process to carry it into effect, or any other objection of that nature. The one that comes nearest to it is the third issue, which is merely whether it is a new manufacture known in England in the exercise and practice thereof at the time the patent was granted ; but that directs the mind of any person who looks at it to a very different inquiry from that involving the question whether the invention is, within the meaning of the statute 21 Jac. I., c. 3, a manufacture for which a patent may be granted—taking it for granted that it is a manufacture, and only raising the question whether, being a manufacture, it was in public use and exercise at the time the patent was granted or not—and therefore, to leave that inquiry and suddenly to decide upon the other in the course and progress of the trial would be to mislead the party who had come into court to contest the question before the jury. I think there is another objection also which would equally stop me from declaring that opinion—namely, that when we look at the notice of objections delivered under the authority of the act of Parliament, and out of which the court cannot go, I do not see one which is pointed to that specific ground of invalidity ; but, in fact, it is no more than carrying our minds to that third plea whether it was a new manufacture within the kingdom of England when the patent was granted ; and therefore I think, upon both these points, as a matter of evidence or as a matter of direction to the jury, I should not have been warranted in raising or putting that objection to them.

Then, the last ground is—is this upon the record so that error may be assigned, and that the court may be called upon to arrest the judgment ; for unless the court can be called upon to arrest the judgment, we have nothing to do but to let it pass in its ordinary course. I think, looking at the terms of the fourth plea, the question does not come properly before us. There is an allegation in that plea that the specification which was enrolled was so and so, stating it in *haec verba*. That is only used as matter of inducement upon which afterward to state a new allegation that top

cards and sheet cards within the meaning of that specification are useless. That is the question which is raised upon the record, and after that has been raised, and the jury have found that issue in favor of the plaintiff, it does not appear to me that the defendants can afterward turn round and make that which was only inducement and not issue, a substantive ground of allegation upon the record of the invalidity of the patent itself. Such appears to my mind at present to be the proper reasoning upon it, but there it is upon the record if the parties upon further consideration should think me wrong. Therefore, upon the whole, I think the judgment must be given for the plaintiff.

COLTMAN, J. It appears to me that in this case there is no sufficient ground for a new trial. As to the first issue which went to the jury, whether the defendants were guilty or not of an infringement, the main pressure of the argument upon that point, as I understand it, has been this—that the jury were misled, and induced to consider that the question for their determination was whether the manufactured article of Messrs. Potter and Horsfall was an imitation of the manufactured article of Mr. Walton, rather than whether it was an infringement of his patent ; and that was founded chiefly upon this, that it was treated, as it is alleged in the course of the argument on one side and the other, as if the use of the non-elastic linen at the back of the card was an essential part of the patent ; and it is said that it was not so—that the patent was merely for the simple application of caoutchouc as the fillet, and that the cotton and linen at the back of it is no part whatsoever of the patent, or of that which is claimed as the patent, but only a part of the manufactured article which is produced ; but, I confess, I do not accede to that view of the patent, because the terms of the specification being, “I confine my claim of invention to the application and adaptation of caoutchouc as the fillet in which the dents or teeth are to be set together, as above described”—that does appear to me to be, not simply a claim to the use of caoutchouc, but to the adaptation of it to the reception of the dents or teeth by putting at the back of it a linen cloth, which in the orig-

inal manufacture is proved to be an essential part of the invention ; for although the cloth may be removed afterward, yet it is by means of having some stiff and permanent substance of that nature that the dents are to be inserted into the caoutchouc, the caoutchouc of itself being a matter so elastic. Therefore there is something more than the simple application of caoutchouc to the manufacture of a card and the inserting of the dents in the fillet. So that it appears to me there is nothing in the application of the argument arising from the use of the linen at the back of the fillet which should lead me to say that the jury have been misled or induced to take a wrong view of this matter when they found their verdict that the defendants were guilty of an infringement.

As to the second plea, that the plaintiff was not the first inventor, certainly it seems the evidence is quite satisfactory that if it was a new invention he was the inventor of it. As to the third plea, or the circumstance whether the invention was new or not, it is said it was not new in respect of its similarity to Hancock's patent ; but I think the answer which has been given by the court on that subject is quite satisfactory, and that any other verdict by the jury upon that point would have been wrong, because in Hancock's patent, although undoubtedly caoutchouc is used, yet it was chemically combined in a way which entirely destroyed its properties as caoutchouc, and made it a perfectly different substance—as different as water from the gases of which it is compounded ; and there is this peculiarity in that patent, that according to no chemical process that is known could the caoutchouc, after being reduced to the state to which Hancock reduced it, be afterward brought again into the state of caoutchouc ; it had permanently ceased to be that which has the chemical qualities or the natural properties of caoutchouc. With regard also to the other question, that the patent does not apply to top cards and sheet cards, it appears to me that the jury had good grounds for the verdict that they have found upon that point. It is said also in the last plea the description in the patent is not sufficient. Upon that very little stress has

been laid in the argument, and I think, upon the whole, there is no ground for saying that there is any difficulty in the understanding of this patent by a person of competent skill. Of course it cannot be expected that I should understand the parts of it in the way in which a person used to the work can, but at the same time I do not know that even an ordinary person like myself, quite unacquainted with manufactures, would find any difficulty in understanding any part of this patent. It seems to me to be explained with sufficient distinctness.

Then it is said there was a misdirection. Now, upon that the first point is the not putting those two questions to the jury. It appears to me those questions were the natural foundation of arguments in the course of the cause, but they were not the issues to which the attention of the jury was to be directed ; and they rather seem to have been suggested for the purpose of betraying the jury into a sort of inconsistency in the verdict they should find than questions really calculated to advance the fair trial of the cause, because, by a very dexterous mode of putting a question, there may be an apparent inconsistency in the finding upon it, and the ultimate result the jury may come to, when substantially they have understood, with all that reasonable degree of certainty with which juries can ever be supposed to understand questions of this nature, the whole bearing of the question before them.

Now, to come to the last point in the case, the question of what is or what is not on the record. Upon that subject I do not at all feel confident that this question is not upon the record, because it appears to me that in substance the defendants in this case have pleaded a plea which if good is an answer to the action, and have added to it some immaterial allegation, assuming that the specification is bad because they set out the specification. I am rather disposed to think that it does appear upon the record ; that this plea, if the specification is bad, would raise that question. Then, though they have gone to trial upon an immaterial issue, I do not feel confident, if the plea were good, that the right course would be to give judgment against the

defendants upon that point. But it appears to me that in this case the plea is not good, because I think the patent is a valid patent. It is true that the invention is very simple in its nature ; but upon the best consideration I can give to this subject, I think, though it is a very simple adaptation of caoutchouc as a fillet, still it is an adaptation of caoutchouc as a fillet in a manner not practised before ; a substance, indeed, well known before, but whose properties and qualities for the purpose of being adapted to this particular purpose had never been known or used before ; and, therefore, it was properly the subject of a patent ; and if it were properly the subject of a patent, then it becomes quite immaterial to see whether, if a different conclusion were come to upon the subject of this specification, the question does or does not arise upon this record.

ERSKINE, J. I am also of opinion that this rule should be discharged. It has been applied for on several grounds. First of all, an application has been made to enter a verdict for the defendants ; secondly, to have a new trial ; or thirdly, to have the judgment arrested, on the ground that the subject-matter of the invention claimed by the plaintiff in his specification is not a legal subject of a patent. As to whether a verdict should be entered for the defendants or whether a new trial should be granted, both turn upon the same question—namely, whether there is any issue upon this record to raise this question before the jury. Because, if there is no issue upon the record to raise this question before the jury, it could not be a misdirection of my lord who tried this cause omitting to state to the jury whether this was, according to the specification, a fit subject of a patent or not ; and, of course, there can be no verdict entered for the defendants if there were no issue upon the record to raise that question. Now, it appears to me there is no issue upon the record to raise the question before the jury, whether this was a fit subject for a patent ; because the only plea upon which it is attempted to be raised is the third plea, and that plea does not assert, as the defendants might have asserted, that this invention was not a new manufacture within the statute of James, upon which the

plaintiff might, by demurring, have raised the question of law ; or might, by plea, have put the defendants to demur ; but it is an averment that this invention was not new as far as regards the public use ; admitting therefore, in substance, that it was such a manufacture as might have formed the subject of a patent, yet that it was an old manufacture known before, and therefore that the plaintiff, in point of fact, would fail by the proof that it was not a new invention, and that he was not the inventor of it.

Then as to the question whether the judgment should not be arrested on the same ground, that depends, first, upon the construction and effect of the fourth plea, and next upon the legal effect of the specification set out upon that plea, if the plea is sufficient to raise that question of law ; but I agree with my Lord Chief Justice that the fourth plea is not sufficient to raise that question of law ; therefore, upon the point of law, I shall forbear giving my opinion. Now, the fourth plea sets out the specification, and then avers that sheet cards and top cards were useless according to the specification ; that this invention is useless as regards sheet cards and top cards. To this the plaintiff might have replied, either denying that this was the specification that he had enrolled, and setting out some other specification which he had enrolled, in which the matter alleged here as a legal defect might have been cured, or he might have taken issue upon the facts alleged as to the utility of the patent with respect to sheet cards and top cards. He chooses the latter course, and for the purpose of trying that question he admits that this is the specification to which he alludes in his declaration, and therefore, as far as this question is concerned, he is willing to abide by this specification ; but it does not appear to me that he admits it for any other purpose, and therefore we are not at liberty to look to that specification, as set out in this plea, for the purpose of deciding whether this is, in point of law, a good patent or not.

Then if, as, according to my opinion, the defendants rightly failed upon the ground that this is not the subject of a patent, the other questions arise, and then the defend-

ants say they are entitled at all events to a new trial ; first, because the verdict is a verdict against evidence ; and next, because even if the evidence might warrant the verdict, the jury were misdirected by the judge, and they have not had an opportunity of considering that evidence in its proper light. Now, as to its being a verdict against evidence, it is said that it is so upon the ground of the second and third pleas ; the second being that the plaintiff was not the inventor, and the third plea being that it was not new in regard to its public use ; and then it is said that this process by which the plaintiff made his cards for carding wool was well known to the public before ; that, first of all, Mr. Hancock had used it ; and next, that he had actually taken out a patent for it and had named it in his specification ; but that at all events it was known to Mr. Hancock and known to the public, partly by Mr. Hancock using it and partly by his having described it in his specification. The first question, therefore, in considering whether this was a verdict against evidence, will be to see whether what Mr. Hancock used and described is, in substance, the same as that described by the plaintiff in his specification ; and it appears to me that, looking at the principle upon which the plaintiff claims this invention, and looking upon the principle upon which Mr. Hancock claims his, they are essentially different. The plaintiff claims his process in respect to the elasticity of the india-rubber, which is the material he professes to use for the purpose of making these cards and of applying the elasticity of this substance in a particular manner—namely, in having the india-rubber, the elastic substance, next to the teeth of the card. In the course of his description of how he uses that india-rubber, he specifies the employment of a piece of holland or other linen for two purposes : first, for the purpose of enabling the card-maker to put in the teeth at equal distances, and next, for the purpose of fixing the card to the machine, if it be not cemented to the machine ; but still his principle is the placing india-rubber as a very elastic substance next to the teeth of the card, so that in its operation you shall have not only the elasticity of the wire of which the teeth are

made, but also the elasticity of the substance upon which the teeth in the first instance rest, using as the mode by which the elasticity is to be in some degree checked and controlled and made useful, either the cloth at the back or the frame of the machine at the back, if the india-rubber be cemented to the machine. Well, then, what is Mr. Hancock's patent? He does not profess to have invented some substance which for its elasticity shall supersede the use of leather in the manufacture of cards, but he professes to have discovered a composition, applied to cloth, by which that new manufacture may be substituted for leather for various and indeed for all purposes. Now, the plaintiff's invention claims for its merit that this is a substance more elastic than leather, not that it resembles leather, but it differs from leather by being more elastic and by being more equable in its thickness and in all its qualities. So that Hancock's plan, being merely a substitute for leather—in which the elasticity of leather forms no ingredient according to his description, but, on the contrary, he uses materials by which his fabric would be less elastic than leather itself, for his plan is by inserting his composition between two layers of cloth, by which the elastic matter, even if it were elastic, would be confined between the two non-elastic substances—would be totally different in principle from that upon which the plaintiff rests his claim. There are, therefore, two objections to the identifying of Hancock's plan with the plaintiff's plan: first, that the composition which he makes use of is not india-rubber, but india-rubber mixed up with other substances which destroy its elasticity; and next, that that composition when thus made is inserted between two non-elastic substances, instead of being next to the teeth of the card, which appears to me to be the main principle of Mr. Walton's improvement; and that is the ground upon which, as I understand it, Mr. Cowper's evidence was given, to show how that elastic principle would be of use in making cards according to Mr. Walton's process, when it would not be useful according to the process adopted by Mr. Hancock, even if the substance he had made use of had been india-rubber in its original form.

Then, if this is not Mr. Hancock's plan, there is no evidence of any other plan by which india-rubber was brought into use, and therefore I think that so far from being a verdict against evidence, the jury could hardly have come to any other conclusion upon the proof that was given that this was new as regarded public use, because there was no evidence to show it had formerly been used by others.

Then comes the issue raised upon the fourth plea, viz., that this invention was inapplicable to sheet cards and top cards. There was evidence on both sides; evidence, however, of witnesses on the defendants' part, who had not tried the experiment, but confined to judgment and belief; while the plaintiff's witnesses, equally entitled to credit, at least, with those on the part of the defendants, spoke of experiments that had been tried and had succeeded. It was for the jury to come to a conclusion which of them were giving the best reasons for the opinion they had formed, and I have heard nothing to convince me that the conclusion they have arrived at is wrong.

Then there remains the first plea, by which it is denied that the defendants had infringed the patent of the plaintiff, and that depends upon whether the plan which the defendants have employed is in substance the same as the plaintiff's, and whether all the differences which have been introduced by them in the manner of making their cards are not merely differences in circumstances not material, and whether it is not in substance and effect a mere colorable evasion of the plaintiff's patent. The jury, it appears to me, have come to a right conclusion that this was in effect and substance the same as the plan of the plaintiff. The plaintiff's plan is the insertion of the teeth through india-rubber, giving to the teeth the additional elasticity of the india-rubber, beyond what the wire had of itself. The defendant's plan is for the same purpose. The only difference is that the plaintiff in employing the india-rubber takes a slice either from the original block as it is imported into this country, or from the improved block as it is used after it has been compressed, and places it upon a piece of holland, for the purpose of keeping the teeth more firmly

in their places, and then afterward placing it on the engine by nailing that holland on the engine, or taking away the holland and cementing the india-rubber to the cylinder, giving an elasticity to the teeth of the card by the india-rubber which is next to them. The defendants' plan is to saturate a piece of cloth with india-rubber dissolved, and then to lay upon the surface a further layer of india-rubber on both sides, and then to insert the teeth through the substance of the cloth and the india-rubber. But what is the principle upon which this becomes useful to the card and the persons who employ these cards in the carding of wool ? Why, it is that there is upon the surface and the substance of the cloth the elasticity of the india-rubber ; that the india-rubber is there in its natural state, having been brought back into that natural state by the evaporation of the material in which it had been first dissolved for the purpose of first laying it on. The only difference therefore is in the mode of laying on the india-rubber for the purpose of having it pierced by the teeth. That appears to me not to be a difference in principle, or a matter which so varies the plan of the defendants from the plan of the plaintiff, as to entitle them to call it a new invention, or different from the plaintiff's. It seems to me a mere difference in circumstances, not material ; and therefore it is an infringement of the plaintiff's right, and the verdict of the jury ought to stand.

But it is said the jury have come to this conclusion under a misdirection of my Lord Chief Justice, in not having put to them certain questions which were suggested by counsel to him. Now, it appears to me the questions that were suggested by the counsel for the defendants were, in substance, put to the jury, so far as the issues raised any such questions for their consideration ; and that it was not the duty of the judge to put them in the form which was suggested by the defendants after the summing up he had already made. If my lord had taken these questions and put them to the jury substantively as asked by the defendants, then the plaintiff would have asked him to put further questions, according to his mode of arguing the case ; and

then there would have been a fresh summing up, quite in a new form, and the jury might have been confused by these supplementary questions. What we have to look to is what direction my lord had given before these questions were proposed, and it seems to me he had put to the jury the questions they had to decide, had brought before them the considerations upon which those questions ought to be decided by them ; and it was unnecessary for him, therefore, to go further and put the questions in the form suggested. Upon all these points, therefore, I am of opinion the verdict for the plaintiff was right, and that this rule ought to be discharged.

MAULE, J. I also think that this rule ought to be discharged. A new trial is asked for on the ground that the verdict was against the evidence. That will depend in some measure upon the sense in which the issues are to be understood ; and what has been thrown out in the course of the argument by my Lord Chief Justice and my learned brother points out what the view of the court is as to the sense of the pleas. With respect to the third plea—that it was not a new invention as to the public use—the meaning of that is, that it was not a new invention, but an old one ; that, whatever it was, it might be a thing which was the subject of a patent, but it was a thing which other people had used before.

With respect to the issue of not guilty, in order to determine whether or not the verdict has been correctly found for the plaintiff on that issue, it is necessary to consider what is the subject of the defendants' patent ; for it is quite clear that what the defendants have done they claim to do under their patent. By their specification the defendants claim to be the inventors of a new material for forming the backs of cards ; and they describe the mode of preparing it thus, viz., "by repeatedly passing a woven fabric of a peculiar construction through and saturating it with a solution of caoutchouc or india-rubber, and then drying it in order to evaporate the solvents and leave the fabric impregnated and coated with caoutchouc or india-rubber, and afterward submitting it to pressure ;" and the

object they describe as being to render the fabric so dealt with "extremely elastic in the direction of the thickness of the fabric, so as to impart, as it were, elasticity to the wire teeth when set." That is, in effect, producing by a circuitous process a cloth with a layer of caoutchouc or india-rubber on each side of it, so as to give a great degree of elasticity to the basis of the dents or teeth of the card. The plaintiff, by his specification, claims the exclusive right of making cards with caoutchouc or india-rubber, as the fillet or sheet or medium in which the dents or teeth are to be set—the object being, like that of the defendants, the attainment of a superior degree of elasticity and durability ; and in describing his mode of attaining that object he states that he inserts the wire dents or teeth in a foundation or fillet of caoutchouc or india-rubber—a slice of india-rubber in its natural state—and that, with a view to preserve the regularity of distance and uniformity of the dents or teeth, and to render their action less uncertain, he cements to the back of the caoutchouc or india-rubber a piece of brown holland or other like cloth. The plaintiff does not confine his claim to using india-rubber by means of slicing it ; he claims the exclusive right of making cards by fixing the dents or teeth in india-rubber, using for that purpose cloth, some texture of linen or cotton. In some instances, he says, the cloth may be removed. That does not, in point of fact, make it less a part of the process by which he applies cloth for the putting the dents into the layer of india-rubber. / If that be so, I think it is evident the defendants claim to do a thing falling within the generality of the plaintiff's claim. Taking that to be so, the evidence is abundant to justify the jury in finding, and it seems to me to require them to find for the plaintiff.

With respect to the issue of its not being new as to the public use, it is alleged that Hancock's patent is the same thing ; that Hancock's patent had been used before, and therefore that this is not new as to the public use. That conclusion is perfectly just, supposing the premises to be supported ; but that Hancock's patent is the same thing is a proposition which I think is wholly untenable. Han-

cock's patent was for making a non-elastic substance as a substitute for leather; when I say "non-elastic" I mean only in a certain popular sense—that is, having no perceptible quantity or degree of elasticity; it was a substitute for leather, leather not being elastic. But with respect to the subject in hand, which is the application of a substance so elastic as in a very small space to yield to so great an extent as to permit the dents, without changing the form of the material of which they are composed, easily to bend to a considerable angle from the surface upon which they are placed—with respect to that degree of elasticity, the substance produced by Hancock, or attempted to be produced by him, certainly was not elastic; it was not an elastic substance, nor was it india-rubber, to which elastic substance the plaintiff confines his claim. Although Hancock used india-rubber in the compound, that compound might just as well be called size, or glue, or pumice-stone, or whiting, as india-rubber, for all these things are used, and the result is a substance which is none of these things, but something else, which if you wanted a short name for you would call artificial leather.

Now, with respect to the fifth issue, as to the invention not being particularly described, it was very ably urged in argument that if you construe the relative with reference to the last antecedent, so as to make glaring nonsense of the specification, it was not a sufficient description; but if you are allowed to employ your understanding, it would be quite intelligible. I do not think there is any objection to the specification with respect to its want of particularity; so that, with respect to the verdict being against the evidence, I do not think there is any reason for disturbing the verdict.

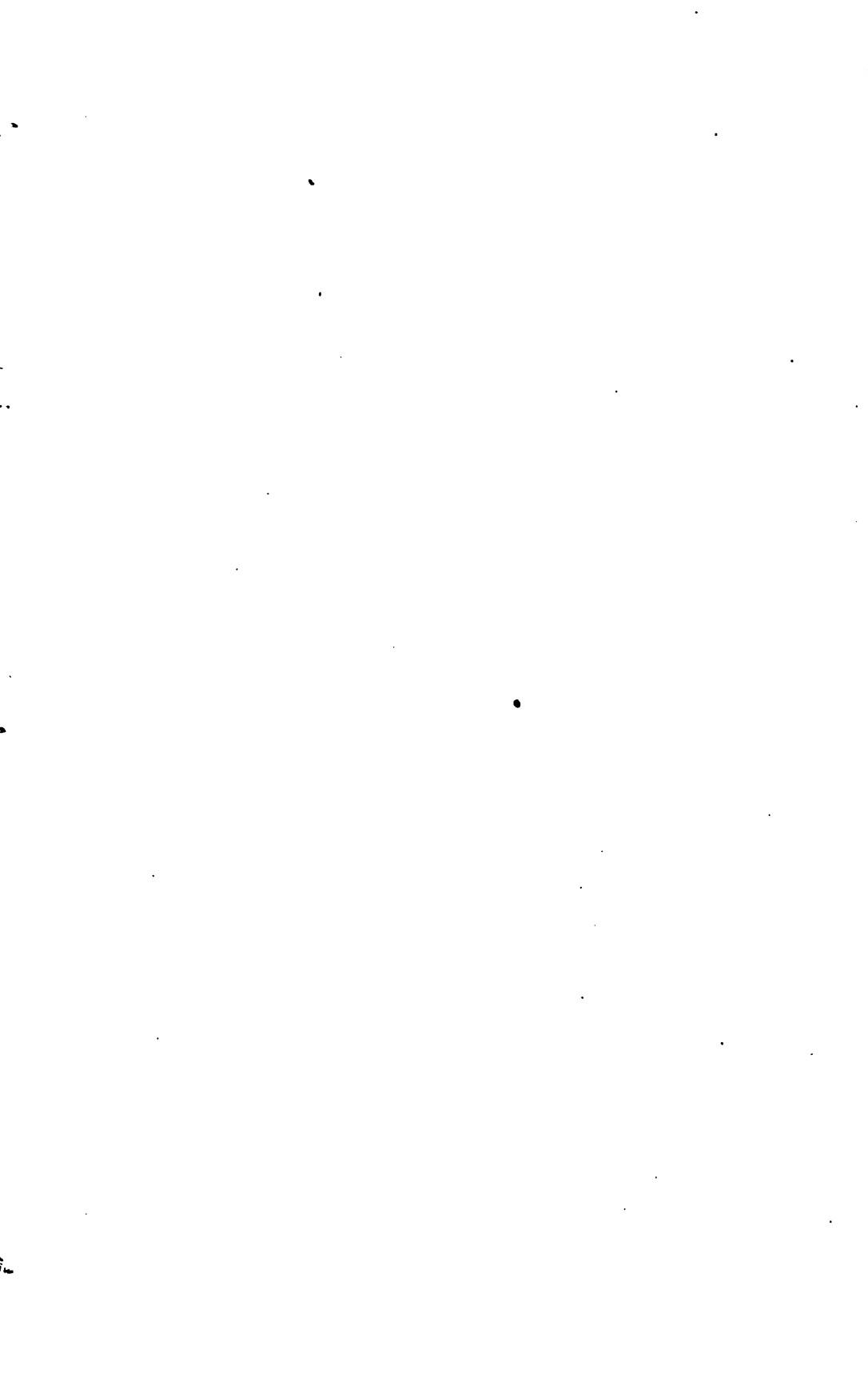
Then, with respect to the arrest of judgment; for the reasons which have been thrown out during the argument, I think the question of the sufficiency of the specification—the question whether the invention is one that is the subject-matter of a patent—certainly does not arise upon the third plea, because, as I have said before, that third plea means it is not new but old, admitting it to be a manufac-

ture for which a patent might be granted. I think the same observation, if necessary, applies to the objection delivered in by the defendants to the plaintiff, which has been relied upon as raising this point. That objection, I think, points, and was intended to point, to the novelty of the invention. There is no doubt in the course of this litigation between the parties, the defendants were more disposed to rely upon the difference, which superficially is considerable, between their own patent and the plaintiff's, and to insist it might stand very well with the plaintiff's, than to say they were the same thing, and both were old, and so let them both open to the public. As to arresting the judgment on the fourth plea—the fourth plea states the specification (mentioned in the declaration to have been duly enrolled) as “a certain specification,” which is set out, and then it does not allege that no other specification was enrolled, but it goes on to state, “the invention is not useful for the purpose of sheet cards and top cards,” and upon that there is an issue, which has been found for the plaintiff. Now, it seems to me, upon this state of the pleadings, the defendants cannot raise the question whether this invention be an invention which is the subject of a patent. Whether, supposing they could raise it—supposing we could look at the specification, it would raise the question whether the invention was not a manufacture within the statute, is a question which I do not think it necessary to decide. If it was sufficient technically to raise that, there ought to have been an averment that the invention was not an invention within the statute; but there was no such averment upon this fourth plea. It states the specification, mentioned in the declaration, to be as set out in that plea; it assumes that the specification shows an invention not within the statute, or does not show an invention within the statute. Still, it may be that the patent is good, or it may be that it is bad, for a patent may be good if the invention really was of a description within the statute, and another specification was duly enrolled. This plea does not show whether the defendants relied upon the insufficiency of the specification or upon the invention itself being

insufficient, and after the issue has been joined and found against the defendants, I do not think they are entitled at all to take into consideration the facts mentioned in the introductory part of the plea. The meaning of the replication is, "With respect to all the facts, except those I think fit to deny, I, the plaintiff, will not raise any question, but I deny that fact;" that fact is found for the plaintiff, and I think that puts the previous allegation of the plea entirely out of the question. But, supposing the facts had been found the other way, and those facts had been immaterial, I do not think a party who pleads a plea informally and concludes with the averment of an immaterial fact can afterward, if that fact is found for him, have recourse to the previous matters in the plea in combination with the rule which provides certain liberal modes of intendment in favor of pleas not specially demurred to. This is not like a plea where there is an issue upon a material fact, or where there is a general demurrer, but the defendants state the specification here to be the specification mentioned in the declaration. It may be, therefore, that if they had concluded there, and stated that this they were ready to verify, and so shown that they relied upon the insufficiency of the specification, it may be that upon general demurrer the plaintiff would not have been entitled in reply to say, " You have not stated there is no other specification ;" but I apprehend he is entitled to say so when the plea which is pleaded is one that does not require that allegation in point of form, and when he is entitled to take issue upon it. I think, therefore, that upon this plea the question—whether the invention is a novel invention, so as to be the subject of a patent—is not a question which is upon the record. It often happens that the invention may be very good and the specification very bad ; and here it is the badness of the invention and not the badness of the specification which is suggested. Therefore I think the judgment ought not to be arrested.

With respect to the alleged misdirection, from the two questions not being put to the jury which were suggested, I think, although it is sometimes convenient that a question

not upon the record—a question of fact, not raised by any of the issues—should be put to the jury, that it is an informal proceeding, which can be only by the consent of all the parties, and that it is subject to many limits. One of them is this, that it ought to be some very short, simple matter, about which there is little or no doubt, and which may be easily decided, and which it may be convenient for the parties upon a motion for a new trial to take to have been decided one way or the other. But where it is likely to lead the jury to a wrong conclusion, where there may be a good deal said about it on both sides, and where there are actually upon the record a considerable number of questions which the jury must decide, then, I think, it ought not to be done, because it might have the effect of creating confusion, which may be a thing for the interest of the party who is in the wrong, but not a thing for the interest of justice ; and it may very often happen that those intermediate questions, these questions of fact, which are incident to the issue to be decided upon the record, may be questions which the jury ought not to be asked. They cannot be asked, I apprehend, without their own consent ; they cannot be compelled to give a verdict upon it for this reason ; it may be that there is an issue joined which involves twelve questions of fact, we will suppose, and if any one of them is found one way, that would sustain a verdict on the issue for the plaintiff or defendant. Possibly upon each of these twelve questions of fact there is one juryman who has no doubt at all, but would find otherwise upon the other eleven. In such a case the jury may be unanimous in finding a verdict for the plaintiff or defendant, and they ought to find for the plaintiff or defendant without further inquiry ; but it may be, and most likely would be, impossible they could all agree upon some one of these facts, and the consequence would be that they could not give a verdict, or if they did at last do so, the verdict might be against the opinion of the jury upon the rights of the parties in the whole matter. There is no rule that a verdict cannot be sustained unless each juryman arrives at his conclusion of fact by the same road. There may be several correct pro-



A. D. 1830, JAN. 18, N^o 5880.
CARPENTER & YOUNG'S SPECIFICATION

FIG. 1.

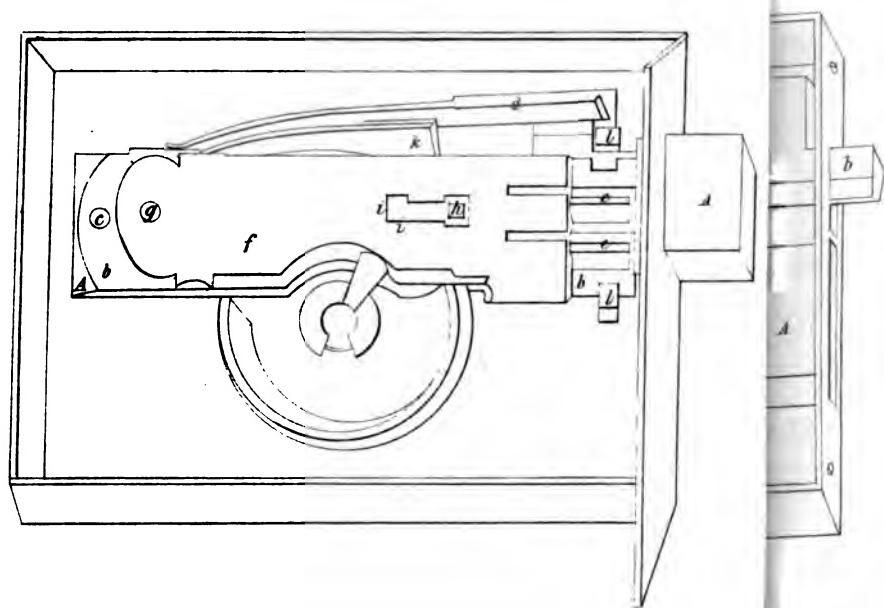
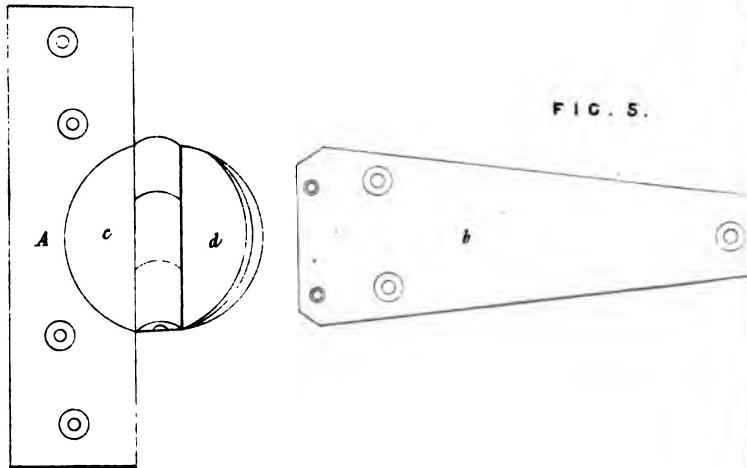


FIG. 5.



A.D. 1830 N° 5880.

Locks and other Fastenings.

CARPENTER AND YOUNG'S SPECIFICATION AND DISCLAIMER.

SPECIFICATION.

NOW KNOW YE, that in compliance with the said proviso, we, the said James Carpenter and John Young, do hereby declare that the nature of our said Invention, and the manner in which the same is to be performed, are particularly described and ascertained in and by the Drawing hereunto annexed, and the following description thereof (that is to say) :—

Figure 1, a secure lock.—*a, a*, the bolt. *b, b*, two tumblers moving on the centre *c*, that is riveted on the bolt. The spring *d* is split at the end, and riveted to the bolt to cause the tumblers *b, b*, to fall when lifted up. At the end of each tumbler *b, b*, is a guard *e, e*, which, when lifted up by the right key, brings the bolt and the tumblers *b, b*, back into the grooves that are at each end of two more tumblers *f, f*, moving on the centre *g*. The pin *h* is riveted into the bolt, and goes when unlocked into the groove *i* in the tumblers *f, f*. The spring *k* is riveted into the plate and moves the two tumblers *f, f*, when lifted up. *l, l*, are two square pins riveted into the plate, which, when either of the tumblers *b, b*, is lifted too high, or not high enough, will keep them from coming back. Figure 2.—*A, A*, the bolt, with its tumbler moving in the usual

Carpenter & Young's Improvements in Locks and other Fastenings.

way. *b, b*, lever or spring bolt ; *c*, its centre ; *d*, the key pressing against a flat piece of brass or iron *E*, moving on its centre *f*, and pressing against the lever or spring bolt at *g*, as seen lifted up by the key *d* out of the staple (at *d*, Fig. 3). The pin *h* in the bolt moves in the groove of the first piece of brass or iron, and as the bolt moves in or out it gives liberty to the key *d* to move the way it is wanted, the slide and dovetail on the lever or bolt keeps it fast when required. At the back of the lock is a knob or handle, which is screwed or riveted into the lever or spring bolt, and a perpendicular groove made in the plate to allow the knob or handle to be raised when required. The follow *i* is intended to show the action of the lever or spring bolt when it is spindled, with a handle on each side to lift up the lever or spring bolt without the assistance of the flat piece of brass or iron *E*, as the latter is intended to open the door outside by the key only. The above improvements will always work pleasantly, and answer better than any other lock hitherto invented to answer the same purpose. The staple and striker to the above lock are represented in Figure 3. Figure 3.—The box staple and striker belonging to the lock Fig. 2. *A, A*, the box staple. *b, b*, the striker, riveted or screwed to the box staple. *c*, an incline for the lever or spring bolt to run up to *d*, where it drops into the box staple and is fast. Figure 4.—The striker belonging to the mortice lock, on the same principle as lock Fig. 2. Figure 5 shews the improvement on the hinge, which, as well as a lock, is a security. The advantage of this improvement consists in the joint or wearing parts being cast on wrought iron flanges, or the joint or wearing parts may be cast and then soldered, brazed, or riveted to the wrought iron parts, depending on the shape or article required. *A, b*, represents a **T** hinge. *c* is a part of the joint represented as cast on to the part *A*. *d* is the other part of the joint, having a split as represented at the edge for the insertion of the part *b*, which may be either soldered, brazed, or riveted, as occasion may serve. The metal used for cast-

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Carpenter & Young's Improvements in Locks and other Fastenings.

ing the joint or wearing parts may be either copper, brass, or iron.

In witness whereof, I, the said James Carpenter, have hereunto set my hand and seal, this Sixteenth day of July, in the year of our Lord One thousand eight hundred and thirty.

JAMES (L.S.) CARPENTER.

DISCLAIMER AND MEMORANDUM OF ALTERATIONS proposed to be entered by James Carpenter and John Young, the Patentees of the said Invention, with the Clerk of the Patents of England, pursuant to an Act passed in the fifth and sixth year of the reign of His late Majesty William the Fourth, intituled "An Act to amend the Law touching Letters Patent for Inventions."

We, the said James Carpenter and John Young, did describe in the said Specification that the Invention consisted of three particulars of improvements,—

First, of improvements in constructing a lock, shewn and described in respect to Figure 1 of the Drawing annexed in the said Specification.

Secondly, of improvements in the construction of locks, by combining in the same lock a sliding bolt and a lever spring bolt, and other parts, as described in respect to Figures 2, 3, and 4 of the said Drawing. And,

Thirdly, of improvements in hinges, as described and shewn in reference to Figure 5 of the Drawing.

And since the enrolment of the said Specification we have discovered that the supposed improvements in locks, shewn and described in respect to Figure 1 of the said Drawing, is not an useful Invention ; for that reason we are desirous of disclaiming, and do hereby disclaim, so much of the Specification which relates thereto. And we have been informed that the supposed improvement in the construction of hinges, shewn and described in respect to Figure 5 of the said Drawing, was not a new Invention at the time of sealing the said Letters Patent ; for that reason we are desirous of disclaiming, and we do hereby disclaim, so much of the Specification as relates thereto. And in order to make the Title of the Patent conformable with the Inven-

Carpenter & Young's Improvements in Locks and other Fastenings.

tion which will then remain, we are desirous to disclaim, and do hereby disclaim, the words "and other securities," thereby reducing the Title to "Certain Improvements in Locks, applicable to Doors and other Purposes." And lastly, we do, in the way of Disclaimer, wish to add the following observation to the Specification, which will then remain, "We do not claim any of the parts separately of the lock shewn at Figure 2 ; and we are aware that locks were made before our Patent having sliding bolts similar to A ; and further we are aware that latches were made before the sealing of our Patent, having lever spring bolts in some respects similar to that shewn at b in Figure 2. We therefore wish it to be understood that we disclaim all right and title to such separate using those parts."

JAMES CARPENTER. (L.S.)
JOHN YOUNG. (L.S.)



cesses of reasoning differing from each other, in which different facts may be considered as proved by different jurymen, by which they may all arrive at the same end—that end being the issue of fact joined upon the record. Upon all these grounds I think the rule should be discharged.

Rule discharged.

See also Walton *v.* Bateman (*post*, May 18, 1842), where the same patent was in litigation and was sustained. *Scire facias* was, however, afterward brought and the patent annulled, but additional evidence was adduced upon that proceeding. See Queen *v.* Walton (*post*, Trin. V. 1842).

CARPENTER *v.* SMITH.

Exchequer, N. P., Mich. V., 1841.

(1 Web. P. C. 580.)

Improved Combination. Prior Public Use. Specification of Improvement. Novelty.

There may be a valid patent for a new and improved combination of mechanical parts which are already known in combination.

The public use and exercise of an invention which prevents it from being considered a novelty is a use in public, such as comes to the knowledge of others than the inventor, as contradistinguished from the use of it by himself in private, and does not mean a use by the public generally.

The specification must distinguish between what is claimed to be new in the invention and what is admitted to be old. Otherwise the presumption is that the patent extends to the whole and to every part.

The making of an article in England, though for exportation, will, as a rule, vitiate a subsequent patent therefor.

The use of a lock in such a situation that the public might see it, *held* a public use and exercise of the invention.

The manufacture and sale, without secrecy, by a workman, of seven and a half dozen of locks according to a model which was retained, *held* a public use and exercise of the invention.

Case for infringement.

The patent in suit was granted to J. Carpenter and J. Young, dated January 18, 1830, for improvements in

door-locks, etc. The declaration set forth the specification and disclaimer and assigned breeches after the entering of the disclaimer in respect of the part of the invention not disclaimed.

The defendant pleaded, 1. Not guilty. 2. That the plaintiff was not the true and first inventor of the part not disclaimed. 3. That the part not disclaimed was not a new invention as to the public use and exercise thereof. 4. The insufficiency of the specification. 5. That the invention not disclaimed was not a new manufacture within the proviso of the statute.

The following notice of objections was delivered with the pleas : 1. That the plaintiff was not the first and true inventor of the said alleged invention or for which the said letters patent were granted. 2. That the said alleged invention was not a new invention as to the public use thereof in England at the time of the grant. 3. That the specification set forth in the declaration was insufficient, inasmuch as it did not set out what parts were old and what new of the lock ; and also inasmuch as it disclaimed the separate parts of the lock without saying what was intended to be claimed, while the title of the patent was for improvements in locks only ; at the same time that much was said in the said specification about box staples and latches which were no part of the locks as appurtenances in the said specification, which treated of them as distinct inventions from the locks and as distinct as the key is from the lock. 4. That the invention was not a new invention within the meaning of the statute 21 Jac. I., c. 3, there being, in fact, no invention pointed out in the specification as the improvements alluded to in the title of the patent.

Kelly, Smith and Webster were counsel for the plaintiff, and *Pollock, Attorney-General*, and *Rotch*, for the defendant. The alleged infringement of part of the invention was admitted ; the combination of the sliding bolt and spring lever latch, with the peculiar form of striker and staple, was described as a great improvement, the door shutting more easily and with greater certainty than when the spring bolt, which has to be pushed back, is used. The evidence as

to the particular parts of the lock became immaterial, the learned judge being of opinion that the specification claimed generally the lever latch and bolt, however combined in the same frame, and without reference to the combination with the other parts shown and described in the specification. The facts of the case are fully stated in the summing up of the judge.

Lord ABINGER, C. B. Admissions have been made in order to reduce the question to the least possible number of points. The plaintiff had taken out a patent in the year 1830 for a new lock. It appears when he first took out the patent he embraced in his patent a great deal of matter, which would have made the whole patent void—that he certainly embraced in it a claim for an invention which turned out to be useless, and for another invention which turned out to be old and not to be useful ; and, therefore, he took advantage of the statute that has been made within the last few years for the benefit of patentees, and by entering at the proper office a disclaimer of certain portions of his former specification, he made that good as far as he could make it good, by striking out the objectionable parts of the specification. But the objection to his specification originally is plain on the face of it, and it was this : it is required as a condition of every patent that the patentee shall set forth in his specification a true account and description of his patent or invention, and it is necessary in that specification that he should state what his invention is, what he claims to be new, and what he admits to be old ; for if the specification states simply the whole machinery which he uses and which he wishes to introduce into use, and claims the whole of that as new, and does not state that he claims either any particular part or the combination of the whole as new, why then his patent must be taken to be a patent for the whole and for each particular part, and his patent will be void if any particular part turns out to be old or the combination itself not new. Now, as the patent stood originally, he neither claimed the combination nor the specific parts, but when he comes to make

the disclaimer, in the year 1839, he disclaims the particular parts ; but I will not call your attention to them, because they are not material, but he retains his claim to Fig. 2, and disclaims the particular parts ; he says, " The latch is not new, the bolt is not new"—but it is plain that he claims the rest. Now, the rest either means the combination or it means a combination within a combination, such as it was that he claimed as his patent. Now, that combination, as it is set forth in his figure, as well as in his patent, consists of a certain brass plate, which is marked with the letter E, and which serves to confine the movements of the two bolts ; that is, of the latch and the bolt latch together, if the party chooses so to use them. But he certainly states that he may use them separately, without the plate E, in which case it is admitted that the brass plate marked with the letter E would not be required. But then his counsel says that the claim is sufficiently large to entitle him to the combination independent of that. Now, that is a question upon which I entertain very considerable doubt, that is a question open for future discussion ; but we assume, for the purpose of trying the question before you, that he may claim a patent for a combination independent of that brass plate marked with the letter E, which it is admitted the defendant has not used. What, then, is the combination he claims ? He does not say that he claims (at least, he does not say in terms that he claims) the combination of the box and the sliding inclined plane in the box ; he does not say he claims that as a part of his combination ; but you are to collect that in the specification from his figures. But, as I understand it, he certainly claims the combination of the two bolts in one frame, and I do not deny that according to the evidence he has given he has proved that there is more advantage in having them in one frame than in two ; we must take that for granted that the advantage here is not questionable. But, then, does he claim the combination in that precise and particular form and no other ? Because, unless he goes on in his specification and says, " I claim the combination in the precise form I have stated, but I do not claim the combination in any other form whatever,"

his claim in general is for the combination of the two bolts in one frame—the one the bolt and the other the latch. Now, on that subject the counsel for the defendant says, “I deny that that combination is new; I deny that it is new in its parts, and I deny that it is new in the combination.” That is the plea. The pleas are changed in two or three different ways, but that is the substance of the pleas. The plaintiff has certainly given evidence to show that the witnesses who have been called had never seen the combination before; but their evidence goes further than that; for Mr. Carpmael and Mr. Bramah both distinctly say, not only that they have never seen the combination before of the two bolts in one frame, but they both say that they never before saw a lifting latch that was raised up by an inclined plane on the box, and by a bearing off of the edge of the latch so as to accommodate the inclined plane and to make it rise more easily and get into the box, and hold it fast. Mr. Carpmael says, in terms, that he had never seen that before; Mr. Bramah says the same thing, that he had never seen that before. Now, I desire you to dwell with some attention on that, because a great deal of argument has been urged here, and a very ingenious reply has been addressed to you by the plaintiff's counsel, and witnesses have been called, some of them persons of great science and extensive knowledge, and these witnesses have been called to prove that they never knew this before; from which you are desired to infer that it could not have been known before to any purpose or effect whatever. Why, the same persons who tell you they never knew the combination before also tell you that they never knew the particular part in its present form before—that is, the latch; when you find from other evidence that that form was well known, that that form was known to other persons, who had introduced it into practice, at least it is an argument to show that the knowledge of these gentlemen, however intelligent they may be, is not to be altogether relied on. Mr. Carpmael was evidently surprised to see the lock put into his hand from the Martello Towers, and admitted that he had never seen anything like it before. I think there are sev-

eral instances which I might allude to which show with respect to the form of the latch and the mode of its being got in the box, that that has been used before. Then what is it that is new? It is the combination that is new; that part is not new. The box has been proved sufficiently to have been used before in that form, or on the same principle; Mr. Carpmael admits it; therefore it is the combination which is new. Now, is the combination new? Upon that you had the evidence of the opinion of many witnesses on behalf of the plaintiff that it was not known before, and that they did not know it before. You have also the facts adduced by the defendant's counsel.

But before I come to consider these facts and apply them to the evidence, I must beg leave to make an observation upon a very important part of the address of the counsel in reply, because I think it is my duty that you should not give your verdict under any mistaken impression of what the law may be. The plaintiff's counsel has referred to the words of the statute to show that the words "public use and exercise" formed a part of the patent, from which he desires you to take the definition of what he calls the legal meaning of the word "new," and he draws this inference, that unless it has been in public use and in public exercise before it is new. I repeat the words that there may be no mistake; the inference he draws from it is this, that unless it was in public use before, and there was a public exercise of it before (that is, exercised by the public before), it is new. Now, I differ altogether from the learned counsel in that respect; and I think what is meant by "public use and exercise," as has been held by my predecessors before, is this: a man is entitled to a patent for a new invention, and if his invention is new and useful he shall not be prejudiced by any other man having invented that before, and not made any use of it; because the mere speculations of ingenious men, which may be fruitful of a great variety of inventions, if they are not brought into actual use, ought not to stand in the way of other men equally ingenious, who may afterward make the same inventions and apply them. A great many patents have been taken out, for ex-

ample, upon suggestions made in a very celebrated work by the Marquis of Worcester, and many patents have been derived from hints and speculations by that ingenious author. But yet, as he never acted on them, as he never brought out any machines whatsoever, those patents are good. So that the meaning of the words "public use" is this: that a man shall not, by his own private invention, which he keeps locked up in his own breast or in his own desk, and never communicates, take away the right that another man has to a patent for the same invention. Now, "public use" means this: that the use of it shall not be secret, but public; and in that sense I must say that if you think the lock used by Mr. Davies is a lock which combines the same thing (I do not say whether it does or not; that is left entirely for your consideration), I think that is a public use of it, and is within the meaning of this clause of the patent, "public use and exercise," as used in opposition to private and secret use. Therefore, if a man invents a thing for his own use, whether he sells it or not, if he invents a lock and puts it on his own gate, and has used it for a dozen years, that is a public use of it. If it were otherwise, see what the consequence would be: Mr. Davies has a lock, which he has directed to be made (we may suppose that to be the case) and put on his gate some twenty years ago; if that were not a public use of it such as would prevent a man from taking out a patent, any man might go and take a model of that lock and get a patent for it. How can he be the "inventor" of it? To obtain a patent a man must be the "inventor"; and if it has been once in public use (that is, used in a public manner, not "used by the public"), if it has been used by half a dozen individuals, or one, in a public manner, any man having access to it, how can he be said to be the inventor if by merely gaining access to that he takes out a patent? For recollect that the words of the statute show that the patentee is to be the inventor; and one of the questions which you have to try is whether he is the inventor, as well as whether there is any novelty in the invention. A man cannot be said to be the inventor of that which has been exposed to public view,

and to which he might have had access if he had thought fit.

Again, the learned counsel laid it down as a proposition that if an invention is made and actually used by a certain number of people, but does not get into public currency and use for twenty-four years or twenty-five years—not brought into activity—that that will not stand in the way of another man taking out a patent for the same invention. I cannot accede to that view of the law at all; I think that is not the law; nor do I think that any of the summings up of the learned judges which have been read to you, that you might understand what the law was, at all support him in that proposition (*Lewis v. Marling*, 1 *ante*, pp. 417, 421; *Jones v. Pearce*, *id.* 473; *Cornish v. Keene*, 2 *ante*, p. 406). Well then, again, he considers that the evidence of the locks proved to have been made by the two Walkers and by Mr. Tilsley, supposing them (which he seems to admit) to be the same invention as the plaintiff's, to rest on the same foundation, for he says because they were made for a foreign market they do not stand in the way of the plaintiff's invention. Now, you will understand this: a man has a right to a patent, not only for his own original invention, but he has a right to a patent if he is the first person who brings into England an invention which is used abroad and not known in England; and if, therefore, any person were to import from America a machine, and have that machine used in England, and were to buy considerable quantities of them, no other person could take out a patent for that because it is a machine used abroad, and a man might have a patent taken out for it in England if he is the original importer of it. But, however, on the case as it stands I see no evidence before me that these locks were used in America. The question that was asked in cross-examination was one which ought not to have been asked—namely, as to the information the party received when he received the order; all the instructions he had about the order were highly proper to be inquired into, but what was to be done with it afterward is a matter of fact collateral to it. But, however, the evidence is this: that a trader living in Bir-

mingham, who is very much connected with the American trade, produced to Mr. Tilsley a model of a lock, and desired Mr. Tilsley, who was a factor and also a manufacturer of hardware goods, to make him first six dozen of the locks, and at another time a dozen and a half, and Mr. Tilsley employed Walker to do it, and gave Walker the model. This was twenty-six years ago, I think, and six dozen of the locks were made at one time, and a dozen and a half at another time, and this gentleman, Mr. Freer, who traded with America, paid the Walkers for them. Here you have an article manufactured by an English manufacturer and sold, and, in my opinion, if it was sold even for the assumed purpose (of which there is no legal evidence), for the assumed purpose of being sent to America, I cannot but think that that would be a destruction of the novelty of the plaintiff's invention. And here let me be clearly understood : I do not mean to say that if a man in America employs an agent to see if he can get an article manufactured in England by a particular model, and chooses to take out a patent for it himself, but not with a view of making it public at all—I do not mean to say that that man is to be considered as not entitled to the invention afterward because he employs a workman to assist him in it, or that if he had failed entirely that some other man might make the invention in England ; but where a model is sent to a workman, who sells seven and a half dozen, and sells them for a certain price, I must say I think the invention was used and publicly exercised. There is no secrecy in the manufacture of them, it is not shut up in the closet of the workman who makes them, but the man who makes them gives directions to another man ; but he sells them for his own profit, and I think it would be the hardest thing in the world if the Walkers were now to use that model and make locks of the same description, if they were to be told to-day, " You cannot do that without violating Mr. Carpenter's patent, although you did it twenty-six years ago, and made a profit by your manufacture of it."

Having made these observations, I now come to the particular cases. The first introduced to you is the locks made

for the Martello Towers. They are said to be made for the Martello Towers, but there is no proof of that. You have before you the man who manufactured them ; he says he was instructed to make the model of a lock, which he thought might be more suitable for the Martello Towers, and on his own invention he made a model. He says that a part of that model still remains, which is the box receiving the lock-bolt, and that the other part has been destroyed ; but that, from his memory, he has made exactly one of these locks which were made for the Martello Towers. He made eighty of them, and received money for them. Now, if they be any part of the invention which the plaintiff claims, then we know that is a public use of them for the reason I gave before—because they are used in public and not in secret. It is not an invention kept in the closet, but there is a public use and exercise of it. But it is stated to you that these locks which were used for the Martello Towers are not exactly of the same description as the plaintiff's, for Mr. Kelly has observed to you, and the observation is very true in point of fact, that the combination the plaintiff claims is not a combination of a latch-bolt together with a lock-bolt in the same instrument, but of a separate latch-bolt and a separate lock-bolt ; whereas in the Martello Towers lock the bolt and the latch were formed by the same piece of iron ; so that the one end of it is used as a latch, and then, when that was not required to be used, it has a bolt, and, by means of a key which is turned, the same piece of iron slides farther and makes the bolt. That is the case in almost every bed-room or drawing-room door-lock which you see in London, or anywhere in the country, because most of them have a latch, by which you may shut the door without the use of the key ; but if you use the key the latch is turned into a bolt ; and I think the learned counsel is right in saying that certainly is not the combination which the plaintiff claims. But it is this : the effect of that is to show that the mode of receiving the bolt, the mode of drawing it out of the lock, and the mode of receiving it into the box by an uplifting latch, by an inclined plane, and by bearing off the edges of the bolt, that that is

clearly not original. The plaintiff's patent, therefore, if good at all, cannot consist in the adoption of that expedient, but in the combination of it with the other—namely, with the bolt.

Now we come to the second case, Mr. Chubb's patent. You will observe that if the plaintiff had thought fit in his specification to say, "I take out my patent for an improved method of combining the bolt and the latch in a more skilful form than has hitherto been adopted, which will remove from it the intricacy of the machinery, but which effects the same combination as before ;" he might have had, for aught I know, a very good patent ; but as his patent is for the combination of the two, then look at Mr. Farey's evidence, and look at Mr. Chubb's lock, which combines them ; it does not combine them exactly in the same way, undoubtedly, but the plaintiff has not claimed the particular way, for then he makes the brass plate E a part of it. But he says he does not mean to say that, but that he claims the combination generally. Mr. Chubb's is undoubtedly the combination of the latch and the bolt, with a more complicated machinery undoubtedly, because his latch consists of four parts, and the plaintiff's bolt of one ; and it is very true that the latch and the bolt must be used together, if you use them both ; that is to say, if you want to lock the door you must latch it also. There is no great prejudice in that undoubtedly ; but such is the fact. It is true that the plaintiff's you may use separately ; but the patent is not for the separate use of either, but the combination. You will consider whether you think Mr. Chubb's lock, as Mr. Farey explains it, is a combination of the bolt and latch. Mr. Farey's evidence is this : he says, "He has been in practice many years, and has been acquainted with machinery of this kind for thirty years ; with all these sorts of subjects." He says, "In a work called the 'Repertory of Arts and Sciences,' published a great many years ago, before this patent" (and he produced a copy of that work, which he then had) ; he says, "In that publication is contained a statement of an invention made by Mr. Chubb, and that he himself prepared the drawings in order

to Mr. Chubb taking out a patent." There is no evidence that Mr. Chubb took out a patent ; that is not material to the circumstance. Mr. Chubb, in the publication, gives figures from which the machine might be made ; a lock was put into his hand, and he says he has one of these locks himself, which was given to him by Mr. Chubb. He himself drew the figures from that lock. He says, " This lock which I hold in my hand corresponds with a part of one of the inventions stated in this publication. There is a description of two locks, one being a latch-lock, and the other the same, with the addition of the sliding bolt. Two figures are described, one is a separate latch-lock, and the other a latch-lock combined with a sliding bolt moved by a key. This which I have in my hand is a combination of both the latch and the bolt, and is one of the inventions described in this publication ; there is no difference in the printed book —the staple in the plaintiff's model and that in Mr. Chubb's lock ;" that is the lock already spoken of. " The latch consists of four distinct latches, each of which has the under edge rounded, and the combination of the four together in action forms an inclined plane. The plan of the sliding bolt is different ; but the principle is the same. The sliding bolt in Mr. Chubb's being broader is above the latches, and also below them." That is true ; it comes out broader and occupies the space of the latches ; " and also below the latches ; but," he says, " the principle is the same, the combination of the sliding bolt with the latch ; that latch was not new in 1830, but is contained in this publication ; there is in the staple an inclined plane" (this is in his cross-examination)—" there is in the staple an inclined plane to raise the latch, and a place or recess for it to fall into when the door is shut, which is exactly the same as the plaintiff's." Now, he says (and he is a man of science) he considers the principle to be the same ; there is no doubt there are more latches in the one than in the other ; but as the plaintiff in his patent has not distinguished it, that he means to take it out in contradistinction to the more complicated machinery—but it is simply the combination of a latch with a bolt—and you have to say

whether that is not the combination of a latch with a bolt, and something more—because his patent is equally bad, if all that it claims has been found in another patent and another invention, combined with something else, unless he makes a distinction and shows that the invention for which he claims the patent has novelty to support it.

The next case is the lock of Mr. Davies. You have had that lock in your hands, and I own, according to my inspection of it, it appears to me, though more rough in its form, to be on exactly the same principle as the plaintiff's. It consists of a sliding bolt, and it consists of an uplifting latch, and they are both in the same frame; they are both received into the same receptacle, with, I think, this difference—that part of the receiver which takes the bolt rises above the enclosed part of the receiver, and so it is a little outside of it; but it is raised to the same external surface. Now, Mr. Kelly argues on this, and says this cannot be considered as any attack on the novelty of the plaintiff's patent, because it was not in public use and exercise. In my opinion, if you believe the witness that the lock was on Mr. Davies's gate sixteen years ago, and that he saw it every day of his life, and repaired it twelve years ago, and has brought it here and described it to you now, it appears to me, if you are of that opinion, that that was a public use of the invention. The application and the practical utility of that before the eyes of the public comes within the meaning of the words, as I understand them, of this patent, and it is only used in contradistinction of a public use and exercise, to which the public has no access. If you believe, therefore, these witnesses (and you saw the lock), and you agree with me that it is the same in principle as the plaintiff's lock, I own it does appear to me that there is sufficient ground to justify you in finding that the invention is not new.

Now we come to the locks made by the two Walkers; but if I understood the learned counsel rightly in his very ingenious and elaborate reply, he admits that those are similar in principle, and the only ground that he takes on that is that they were not in public use and exercise. It

appears to me that they are similar in principle, for they are exactly the shooting bolt and the lifting latch, and you may use them by a separate application and with this addition : there are two separate applications—the one which the witness called a bagpipe latch, which is pressing down at the top, and the other, a horizontal shaft to press it down, which might act on either side with pressure. It opened the latch, and the key opened the lock. It seems to me to be exactly the same as the plaintiff's. Then we come round to the question which I stated before, that the manufacture of a dozen and a half in the month of May, and six dozen in February before, by a British workman, who still retains the model, is a public use and exercise of it ; he makes no secret of it, and they are sold by him, and he is paid for them. I think it would be a very hard thing to say that he could not use the same invention now because the plaintiff has taken out a patent for it. However, it is for you to consider whether all these different locks which have been produced before you, combining the latch with the bolt, are the same in combination, the same in principle ; and if you are of opinion (not that they were generally adopted by the public and used by the public, for that in my opinion is a perfect fallacy) that the use of them is public, and the exercise of the invention was public, and not kept secret so that the public might have no benefit from it, then, I think, that part of the issue you ought to find for the defendant.

Verdict for the defendant.

A subsequent motion for a new trial on the ground of misdirection was denied. (See *post*, p. 358.)

WILSON v. TINDAL.

Chancery, M. R., Nov. 26, 1841.

(1 Web. P. C. 780, note.)

Temporary Injunction. Imposing Terms.

The injunction restraining infringement of a patent pending the determination of an action at law directed to be brought to try the validity is an interlocutory order, and temporary ; granted not of right, though almost as matter of course, as the most convenient mode of making the further investigation which the case shows to be necessary.

Motion for an injunction.

A bill was filed by the plaintiffs Wilson and others, assignees of letters patent granted to Soames, dated September 9, 1829, for a manufacture of cocoanut oil, to restrain defendant from infringing the patent ; and this application was made for an injunction pursuant to the terms of the bill.

Lord LANGDALE, M. R. Having regard to the arguments on the validity of the patent, to the enjoyment of it by the plaintiffs, and to the evidence which appears upon the affidavits which have been made in this case, I am of opinion that the injunction which is applied for ought to be granted.

The question for consideration is whether any terms ought to be imposed upon the plaintiffs, or whether any other mode of investigating the facts than that which is adopted in the usual course of proceeding in this court ought to be adopted. It is to be observed that all orders made on applications of this kind are merely interlocutory orders ; they do not bind the right between the parties. The injunction which I have stated it to be my intention to grant will be an injunction, of course, only till further order. It will not be a perpetual injunction ; not an injunction to continue during the continuance of the patent. Notwithstanding this order, the defendant may put in his answer, he may displace all the affidavits which have been filed on both sides. The plaintiff and the defendant may respec-

tively proceed to evidence, they may bring this cause on for a hearing, and upon the hearing of the cause the whole case, the law regarding the patent and the facts which will appear upon the depositions, will have to be reconsidered, and that reconsideration may, for anything that can be known to the contrary, justly end in a result different from that which I have come to upon the present occasion.

The defendant having his option to adopt this course of proceeding, has at the bar expressed his desire to have this matter tried at law. If he were left merely to prosecute a scire facias for the repeal of the patent, that would be one part of the question which he might in that way try. But there are other questions subsisting between the parties regarding matters of fact, which could not be tried in that way.

Now, it has been stated by Lord Cottenham that he recollects no instance in which the court has not adopted the course of directing the trial of an action ; he has stated that to be the result of his experience. I certainly am very reluctant to try my own memory against that, but I should have supposed that there were instances in which that had been done. It is not the right of parties in every case to have an action tried in a court of law ; it is a question of convenience, and the court is to exercise a fair discretion. I have no doubt whatever of the competency of this court to grant an injunction *simpliciter*. Neither had Lord Cottenham any doubt of it. But the question is whether, when there is an opportunity for carrying the matter further, it is not, on the whole, a convenient course of proceeding to have it tried before the tribunal which is most proper for the determination of the legal question, and by which the facts can be better investigated than they can here. It is not, therefore, upon the ground of any doubt as to the validity of the patent that I make the order which I am about to make ; but it is because the nature of the case entitles the defendant to a further investigation in one form or other, and the most convenient and most effective mode appears to me to be that which has been mentioned—namely, by bringing an action in a court of law. Notwith-

standing, therefore, the very forcible arguments I have heard upon this subject, I think I must in this case, as has been done in so many other cases, direct the plaintiff to bring an action to try this right, the injunction being granted in the terms of the notice of motion.

NEILSON v. HARFORD.

Chancery, Dec. 14, 1841.

(1 Web. P. C. 878.)

Revivor of Injunction after Trial at Law.

Where the plaintiff is directed to proceed at law, in order to try the validity of his patent, and obtains judgment, an injunction is allowed almost as a matter of course.

Motion to revive injunction.

The earlier proceedings in equity are reported in connection with Neilson *v.* Thompson, *ante*, pp. 136, 151; and Neilson *v.* Fothergill, *ante*, p. 146.

Lord LYNDHURST, L. C. This was a motion to revive an injunction. The injunction had been dissolved by the late Chancellor, the defendants undertaking to keep an account, and the plaintiffs either to bring or to proceed in an action at law, for the purpose of trying the validity of the patent. The action has since been tried, and judgment has been entered up in the Court of Exchequer. It is, under these circumstances, almost a matter of course that the injunction should be allowed.

On the part of the defendants it has been stated that the learned judge who tried the cause, and who was one of the judges of the court where the question was finally decided, dissented from the opinion of the rest of the court; and it is also stated, on the part of the defendants, that from the course which the proceedings took they were deprived of their right of bringing a writ of error.

I have, in consequence of these objections, thought it my duty to read the report of the trial and of the proceedings in the Court of Exchequer. I do not find that the learned judge, to whom reference was made, did dissent from the opinion of the rest of the court. He said, undoubtedly, that it was a question of nicety, and he entertained great doubts with respect to the question ; but he himself delivered the judgment of the court, and said, in the course of delivering that judgment, that he could not say that the construction put by the court upon the specification was wrong.

With respect to the other objection that was made—namely, that the defendants were deprived, by the course of proceeding, of bringing a writ of error, the facts of the case appear to be these. Toward the conclusion of the trial the learned judge suggested as the proper course to be pursued that the facts should be stated in the shape of a special case, or that they should be put upon the record, in order that the case might go, if necessary, to the last resort. The counsel for the plaintiffs assented to this ; at least he assented to have the facts stated in the shape of a special case, with a view to its being afterward turned into a special verdict, in order that the question might be upon the record. The counsel, however, for the defendants, the late Attorney-General, finding the opinion of the learned judge with him, thought that a different course would be most advantageous for his client, and he adopted it. He insisted that the verdict should be entered on the issues ; and I think in pursuing that course he waived any further right to a writ of error, and made his election to abide by the decision of the Court of Exchequer. Under such circumstances I do not think it reasonable, the decision of the court being against him, that he should now turn round and say that I ought to have the advantage of the other course of proceeding at the expense of the plaintiffs.

I am the less disposed to depart from the usual course in cases of this kind, after having attentively considered the judgment of the court as compared with the specification. I think the construction put upon the specification is a

reasonable construction. The whole question turns upon the meaning of the word "effect" in the specification, as to the sense in which that word was used by the patentee; and I think, adverting to the other parts of the specification, that the construction put upon it by the Court of Exchequer is a reasonable and proper construction; and I think, adverting to the last clause of the specification, that that must be the meaning of the word effect in that clause; and that, therefore, it would be difficult, consistently with the rules of law, by which an instrument must be construed taking it altogether, to have put another construction on the instrument.

An objection was taken, arising out of the form of pleading, by Mr. Roupell; but it does not appear to me that there is any validity in that objection. The case is of this description. The plaintiffs allowed the defendants to use the patent, by way of trial, for a certain period. They did use it for that period, and kept an account and rendered that account. They were allowed to make this trial with a view afterward of taking a license, and paying, if they thought proper, a certain allowance for using the patent. They did not take the license. They afterward continued to use it. They refused to render any further account, in consequence of which notice was given to them to discontinue using the patent; and after that notice was served upon them, it was clear, if they continued the use of the patent, and they did, they would be liable to an action, and liable also to a proceeding in this court and an injunction. For these reasons I am of opinion that this injunction ought to be allowed.

Injunction revived.

CARPENTER v. SMITH.**Exchequer, Hil. T., 1842.**

(9 Mee. & W. 800.)

Public Use. Mere Experiments.

"Public use" is such a use in public as brings the invention to the knowledge of others.

Motion for a new trial.

The action was for infringement, and a verdict was rendered for the defendant at the trial below, Mich. Vac., 1841.

Kelly now moved for a new trial, on the ground of misdirection. The rule of law on this subject is not so narrow as it was stated to be by the learned judge. The mere manufacture or use of an invention by an individual, who may himself have discovered it, even in such a manner that a particular portion of the public in his particular locality may have access to it, but without its being sold or brought into the market, does not constitute such a public use or exercise of that invention as to prevent another person, who does not copy it, from afterward obtaining a patent for the same principle (*Morgan v. Seaward*, 2 *ante*, pp. 262, 419). [ALDERSON, B. How, then, do you get over the case of the invention for which a patent was avoided because it had been previously published in a book, the principle being that it could be appropriated by anybody, because it had already been given to everybody?] All that is required by the statute 21 Jac. I., c. 3, s. 6, is that the grant shall be made "to the first and true inventors of such manufactures which others at the time of the making of the grant did not use." The statute intended to prevent loss to the inventor of a useful instrument, who brings it into public use and exercise, by reason of the making of a former similar invention not brought into practice, or the use whereof may be said to have ceased. [Lord ABINGER, C. B. By how many of the public would you allow it to be known, and what are the public? How vague a rule you would establish for

each case ! Would you say that the use by a particular club would be a use by the public, or suppose the inventor of a machine gives away a hundred among his friends, and they use it ?] In Lewis *v.* Marling (1 *ante*, pp. 417, 421) a model and a specification of a machine similar to that for which the patent was granted had been brought over from America and shown to several persons ; but it was held that as no machine had been manufactured and brought into use, and as the patentee had not seen that model or specification, he might still be considered the inventor. So in Jones *v.* Pearce (1 *ante*, pp. 464, 473), where it was proved for the defendant that a Mr. Strutt had constructed wheels similar in principle to that of the plaintiff's. Patteson, J., in summing up to the jury, said that if it appeared that the wheel "was used openly in public, so that everybody might see it, and the plaintiff had continued to use the same thing up to the time of taking out the patent, undoubtedly that would be a ground to say that the plaintiff's invention was not new." [ALDERSON, B. That is the very same principle of law as was laid down by my lord in the present case ; the only restriction I should put upon it would be that it need not appear that the machine was used up to the time of taking out the patent.] People would not become acquainted with the principle of this invention by passing along the road, past the gate, by thousands ; and yet thereby a person *bona fide* discovering it for himself, and bringing it into public use in another part of England, is to be precluded from taking out a patent. Such a construction of the law is surely too large.

ALDERSON, B. I think there ought to be no rule in this case. I have not the least doubt that that is the right construction of the law which my lord has put upon it. Public use means a use in public, so as to come to the knowledge of others than the inventor, as contradistinguished from the use of it by himself in his chamber. How, then, can it be contended that the lock which has been used in public by Mr. Davies for so many years is a new invention ? If the plaintiff's doctrine is correct, it would follow that if

Mr. Davies were to change his lock to another gate he would be liable to an action for an infringement of the plaintiff's patent. The case of *Lewis v. Marling* went to the very extreme point of the law.

GURNEY, B., concurred.

Lord ABINGER, C. B. I agree in thinking that there is no ground for disturbing the verdict. I was counsel in the cases of *Lewis v. Marling* and *Jones v. Pearce*, and I recollect that those cases proceeded on the ground of the former machines being, in truth, mere experiments which altogether failed. The public use and exercise of an invention means a use and exercise in public, not by the public. There are some expressions in former cases which were referred to on the trial, which rather leant toward Mr. Kelly's argument, and I therefore thought it fit to lay down the rule of law in the broad terms I did. I have always entertained the same opinion on the subject.

Rule refused.

SPILSBURY *v.* CLOUGH.

Common Pleas, Jan. 21, 1842.

(2 Gale & D. 17.)

Disclaimer by Patentee who has Assigned. Suit for Infringement by Assignees. Plea denying New Manufacture.

The assignees of letters patent, in respect of which a disclaimer had been enrolled by a grantee who, at the time of the enrolment, did not possess the entire patent, *held* entitled to sue for infringement.

A grantee of letters patent, though having entirely parted with his interest, may enter a disclaimer.

A plea that the invention was not, at the time of making the letters patent, a new manufacture within this realm, *held* bad for duplicity.

It seems that the plea would have been good if the words of the statute (21 Jac. I., c. 8, s. 6) had been pursued.

Demurrer to plea.

The action was brought by Spilsbury and Abbott, for

infringement of letters patent, granted March 22, 1836, to W. Maugham, for certain improvements in the production of chloride of lime and certain other chemical substances. The declaration, after stating the invention and the grant in the usual manner, further stated that Maugham, by indenture of April 16, 1839, between himself of the first part, and the plaintiffs respectively of the second and third parts, assigned to the plaintiff Abbott two equal undivided third parts or shares in the said letters patent and in the invention and improvements protected thereby, to hold, etc., for his own use and benefit absolutely for the residue of the term ; and that afterward, by another indenture of the same date, between Maugham of the one part and the plaintiff Spilsbury of the other part, Maugham assigned one equal undivided third part or share in the said letters patent and invention and improvements protected thereby to Spilsbury, for his own use and benefit, for the residue of the term ; and that afterward, on April 17, 1839, Abbott, by indenture between himself of the one part and Maugham of the other part, reassigned to Maugham the said two equal undivided third parts in the said letters patent ; and that afterward and while the said Maugham was so possessed of and interested in the said two equal third parts in the said letters patent, as last aforesaid, and before the committing of the said grievances on November 14, 1838, Maugham, in pursuance of the act (5 and 6 Will. IV., c. 83), with the leave of the Solicitor-General first had and obtained, and certified by his fiat and signature, duly enrolled with the clerk of the patents of England a disclaimer of a certain part of the said invention, and a memorandum of alteration in the specification of the said letters patent. That afterward, on November 14, 1839, Maugham, by indenture between himself and Abbott, assigned the said two third parts back again to Abbott. The breaches were assigned in the usual form.

The defendant among other pleas pleaded, fourthly, that the said invention in the said letters patent mentioned was not at the time of the making of the said letters patent a new manufacture within this realm, within the true intent

and meaning of the act of Parliament in that case made and provided.

To this plea there was a special demurrer, assigning for grounds that it does not appear with certainty whether it is intended in the plea to dispute that the invention is new, or that it is a manufacture within the meaning of the statute ; and that although in the plea it is alleged that the said invention was not at the time of making the letters patent a new manufacture, yet it is not stated, nor does it appear thereby, whether the said defendant intends to rely on the fact that the invention was at the time of the making of the said letters patent publicly known, or that the said invention was not new to the inventor ; and also that the plea attempts to put in issue matter of law—namely, whether the invention is a manufacture within the meaning of the statute.

The defendant gave notice that the declaration would be objected to.

Petersdorff, in support of the demurrer. The declaration is good and the action maintainable. The alleged objection, that Maugham had no right under 5 and 6 Will. IV., c. 83, s. 1, to make the disclaimer, because at the time he was not possessed of the entire interest in the patent, but of two thirds only, does not properly arise, for the plaintiffs are the parties in whom the entire right to the patent is vested. But the disclaimer was properly made, for the statute gives the power of disclaiming to “any person who, as grantee, assignee or otherwise hath obtained letters patent,” so that Maugham had power to disclaim either in his original character of grantee or in his subsequent character of assignee. As assignee, certainly, he had obtained two thirds only of the patent at the time of disclaimer, but the plaintiffs have assented to his act by bringing this action. The real question is whether a party who has not the whole interest cannot disclaim in conjunction with the parties who have the remainder.

The plea is bad for ambiguity. It alleges that the invention was not a new manufacture within this realm, within the meaning of the statute ; so that it is doubtful whether

the defendant means to contest the novelty of the invention or that it was a manufacture.

Cleasby, contra. The declaration shows no right of action ; for Maugham, at the time of disclaimer, was possessed of two thirds only of the patent. The circumstance of his having been the original grantee is immaterial. The words of the statute are, as "grantee, assignee or otherwise." [COLERIDGE, J. What is the meaning of the word assignee?] It may mean the assignee of a foreign patent. [COLERIDGE, J. The assignee may be said to have obtained the patent from the grantee.] But then a person who has a right to a part of a patent cannot disclaim. It is not probable that the legislature intended anything so unreasonable as that the original grantee should, at any time after he has parted with his interest, have the power of affecting the patent ; and the phrase "obtained letters patent" in the statute clearly means possessed of letters patent. If the concurrence of other part owners in the patent would qualify Maugham to enter the disclaimer, their concurrence should have been averred.

The plea is good. If it is bad, it is bad for duplicity ; and it has not been demurred to on that ground. The plea alleges distinctly that the invention was not a new manufacture within the statute of James. There is no ambiguity in that allegation, though it may be objected to as double, inasmuch as it denies that the invention is new and that it is within the statute. But the plea is, in truth, not double ; for the allegation is one connected proposition, containing a single defence, to which both the statements involved in the allegation are necessary. Such a mode of pleading is good.

PATTESON, J. "Obtained" cannot very well be taken merely to mean "possessed," in the statute 5 and 6 Will. IV., for in the second section provision is made for allowing a party who has obtained a patent for something, of which it turns out he was not the first inventor, to petition for a confirmation of the patent ; in that section the person spoken of as having obtained the patent is clearly the original grantee.

WIGHTMAN, J. The plea does not follow the words of the sixth section of the statute of James, which makes a reservation in favor of letters patent heretofore made, of the sole working or making of any manner of new manufacture within this realm.

Petersdorff, in reply. The question how far an assignee who had been grantee may disclaim does not arise, because in this case the disclaimer was by the grantee. There is nothing in the act to intimate that a party entering a disclaimer should have any present interest. The plea is uncertain. It would be difficult in advising on evidence to say what defence the plaintiff must be prepared to meet.

Lord DENMAN, C. J. The first question is whether the declaration is good. The disclaimer is stated to be by the grantee of the letters patent at a time when he had not the entire interest in them. I think he falls within the description given in the statute of the person who may enter a disclaimer, and that the declaration is good. Any inconvenience which might arise from such a power may be obviated by the exercise of the discretion conferred upon the Attorney and Solicitor-General, who will, before they grant leave for that purpose, take cognizance of the name in which permission is given.

The second question is on the goodness of the fourth plea. Suppose the words of the statute had been followed ; then, I think, it would have fallen within the rule which allows of a complicated proposition being pleaded though consisting of several facts. But the words of the statute are not followed, which are, "the sole working or making of any manner of new manufactures within this realm ;" and therefore, being used in the ordinary sense, it is left doubtful whether the objection is that the invention is not new, or that it is not a manufacture within the statute (21 Jac. I., c. 3). That is clearly not a complicated proposition, but two propositions ; and therefore the plea is bad.

PATTESON, J. I cannot read the first section of Stat. 5 and 6 Will. IV., c. 83, without being convinced that the word "obtain" refers to the act of applying for and obtain-

ing from the Crown a grant of letters patent, though at the same time I do not understand the words "assignee or otherwise." It is indeed argued that the word "obtain" may mean "get into his possession," through any other channel; but looking to the second section we find the same word, and there it is clear that it has the meaning which I attach to it; for it mentions any person who shall have obtained letters patent for any invention being found to be not the first inventor thereof, and gives power to him or his assigns to petition the Crown. And I do not see why the same sense should not be attributed to it in the first which it obviously has in the second section. Therefore, if the grantee has entirely parted with his interest, I think he would be a proper person to enter a disclaimer, if the Attorney or Solicitor-General, whose permission is made necessary, should think proper to allow it. But this declaration shows that the original grantee had reconveyed to him two thirds of the interest in the patent, whether collusively or not is not now a question.

As to the fourth plea, I thought at first that it contained one connected proposition, but the words "within this realm" apply to the working or making of the manufacture; and the words of the statute are not strictly pursued. I think the plea is ambiguous, and that the plaintiff might be put in a difficulty how to meet it.

COLERIDGE, J. I am of opinion that the declaration is good. The words of the statute extend to what has been done in this case; and the disclaimer has been made by the party who has obtained it within the meaning of the statute. The words "assignee or otherwise" may be reconciled with our construction, "that the person who has obtained" means the original grantee, for the words "assignee or otherwise" may apply to a foreign invention, of which a party in this country may become the assignee, and be the first to obtain an English patent for it. The inconvenience which would result from allowing a person who has parted with his right to enter a disclaimer without any restriction is obviated by the provisions with respect to the caveat and by the control to which it is subjected of the officers of the Crown.

The fourth plea is substantially defective ; a person asked to advise upon the evidence to rebut it would be in doubt as to the point to which it should be directed.

WIGHTMAN, J. It is only by a forced construction that the word "obtain" could be construed to apply to any other person than the person to whom originally the letters were granted by the Crown. The argument *ab inconveniente* is answered by a reference to the provisos in the first section.

If the fourth plea had omitted the words "within this realm," it might have been good ; but as it stands, it applies those words to the invention, whereas the act applies them to the working or making.

Judgment for the plaintiff.

ASSIGNMENT.—Act of Parliament authorizing assignment is of a private nature, the only effect of declaring it public being to make it subject to judicial notice. *Hesse v. Stevenson*, 1 *ante*, 121. Effect of assignment by patentee in bankruptcy. *Bloxam v. Elsee*, 1 *ante*, 876. Construction as to transfer of title in assignment of patent right. *Cartwright v. Amatt*, 1 *ante*, 110.

DISCLAIMER.—Under Stat. 5 and 6 Will. IV., c. 83, patentee may disclaim part of his invention after verdict adverse to validity of patent, and thus preserve new and useful parts of invention. *Morgan v. Seaward*, 2 *ante*, 419. Where patent is originally voidable under statute, by filing disclaimer of part of invention, the act has not a retrospective operation so as to make a party liable for an infringement of the patent committed prior to time of entering such disclaimer. *Perry v. Skinner*, 2 *ante*, 454.

QUEEN *v.* WALTON.

Queen's Bench, Hil. V., Feb. 5, 1842.

(2 Q. B., Ad. & E., 969.)

Scire Facias to repeal Patent. Bill of Particulars.

On scire facias to repeal a patent, the prosecutor having, while the record was in Chancery, filed notice of objections, under statute 5 and 6 Will. IV., c. 83, s. 5, namely, that other persons than the patentee had used the invention

in England before grant of the patent, the Court of Queen's Bench refused, on motion after proceedings were brought therein, to order delivery of a particular stating the names and addresses of such persons.

Rule to show cause why a prosecutor in a scire facias to repeal a patent should not deliver particulars.

James Walton having obtained a patent for improvements in cards for carding wool, cotton, silk, etc., which patent is described in *Walton v. Potter*, p. 162, proceedings in scire facias were instituted in the Petty Bag Office of the Court of Chancery for a repeal of such patent. The scire facias and declaration stated that the supposed invention was not a new invention as to the public use thereof in England, and that, before the letters patent were granted to defendant, part of the invention had been used by others in England. The prosecutor also filed a notice of the objections, pursuant to statute 5 and 6 Will. IV., c. 83, s. 5, stating that before the granting of defendant's patent, a patent comprehending part of the invention claimed by him had been granted to one Thomas Hancock. (For Hancock's patent see *Walton v. Potter* above.) Neither the declaration nor the objections specified the name of any person supposed to have used such part of the invention. The defendant applied to the Master of Rolls for an order upon the prosecutors to deliver a particular of such names, but the order was refused. The record was brought into this court.

Kelly obtained a rule calling on the prosecutor to show cause "why he should not deliver to the attorney or agent for the defendant a statement in writing containing the names and places of abode of the persons whom he intends, upon the trial of this cause, to prove have manufactured or used the invention for which the letters patent in the pleadings in this cause mentioned were granted to the defendant; or why, in default thereof, the said prosecutor should not be precluded from giving evidence of such prior manufacture or use." He moved on affidavit stating the above facts, and that the defendant had no other means of gaining the information required, and was in danger of being

taken by surprise at the trial, unless the particulars were ordered.

Follett, Solicitor-General, showed cause. He urged the refusal of the Master of the Rolls, and contended that the prosecutor had, in his notice filed in Chancery, given the information required by the statute by stating the nature of his objection, and was not bound, in addition, to furnish names.

Kelly and *Addison* stated that similar rules had been granted by the Court of Common Pleas in former patent cases.

Lord DENMAN, C. J. On the application of Mr. Kelly for a particular in this case, we agree with the Master of the Rolls rather than with the Court of Common Pleas, and think that the particular should not be ordered.

Rule discharged.

The trial of the scire facias is reported, *post*, Trin. V., 1842.

BROWN *v.* ANNANDALE.

House of Lords, Feb. 25, 1842.

(1 Web. P. C. 438.)

Prior Public Use. Invention Patented for Scotland.

The public use of an invention in England, prior to the date of letters patent for Scotland, will invalidate such letters patent.

It seems that the use of an invention in any of the colonies abroad would invalidate subsequent letters patent for England.

Appeal from the Court of Session of Scotland.

The appellant had obtained letters patent under the seal appointed by the Treaty of Union to be used in place of the great seal of Scotland, on a warrant under the sign manual, dated at St. James', January 26, 1836, and written to the seal registered and sealed at Edinburgh, February 4, 1836,

for "a certain improvement or certain improvements in the making or manufacturing of paper."

The specification was enrolled in the Chancellory of Scotland, January 4, 1836.

The appellant (the pursuer in the court below) applied to the Court of Session for suspension and interdict against the respondents (the defenders in the court below), in using certain machinery in the manufacture of paper. The respondents, in their answers to the note of suspension, denied that the machinery complained of was substantially the same as that described in the specification ; and stated further that the letters patent were void, because the alleged invention was not new, having been known and publicly used and practised both in England and Scotland before the date of the patent.

The note of suspension and interdict was then merely passed to try the two questions, of the infringement and the validity of the patent ; the interdict was not pressed.

The appellant then instituted a summons for damages ; in answer to which the defendants, as before, denied the infringement ; also the validity of the patent on the ground that the invention was not new, having been known and publicly used both in England and Scotland prior to the patent.

The above two processes having been (according to the practice of the Scotch courts) conjoined by interlocutor, a record was made up and certain admissions and issues were agreed to.

The issues came to be tried before Lord Mackenzie, one of the judges of the First Division of the Court of Session, and a jury, on May 14 and 15, 1841 ; and after the evidence on the pursuer's part had been concluded, the counsel for the defenders, in his address to the jury, stated that it would be a part of the defenders' case to bring evidence to prove, *inter alia*, his averment on the record, that the invention specified by the pursuer had been publicly used in England before the date of his patent. Whereupon the admissibility of any such evidence was objected to by the pursuer's counsel on the ground that previous public use

of the invention in England was not a ground for invalidating the pursuer's patent for Scotland. Lord Mackenzie overruled the objection, and decided that the evidence was admissible, as proving a ground of the invalidity of the patent. Against this judgment the counsel for the pursuer excepted, and lodged the following minute :

" In respect of the opinion of the judge that the use and practice averred as to England is competent in evidence to establish the first issue for the defenders, the pursuer admits that the verdict must, in point of fact, go on that first issue for the defenders, subject to exception to the opinion of the judge ; the pursuer admitting that, if the above point of law is decided against him, the defenders are entitled to judgment in the cause."

Upon which the jury, " In respect of the matters proven before them, and of the minute of the counsel for the pursuer, find for the defenders on the first issue."

The bill of exceptions came to be argued before their lordships of the First Division of the Court of Session, when, on July 8, 1841, they pronounced the following interlocutor : " The lords, having heard counsel for the parties, disallow this bill of exceptions."

The above decision in favor of the defenders was further carried out by the following additional interlocutor or decree : " The lords, in respect of the verdict of the jury in this cause, apply the same ; and in the process of suspension and interdict, find the letters orderly proceeded, and dismiss the suspension ; and in the action of declarator and damages, asoilzie the defenders from the conclusions of the summons and decern ; find the defenders entitled to expenses in the said conjoined actions, and remit the accounts when lodged to the auditor to tax and report."

Against the above two interlocutors the appellant (the pursuer below) brought the present appeal, praying that their lordships would be pleased to reverse, vary or alter the same, or that he might have such relief in the premises as to their lordships should seem meet, and for the two following reasons :

1. There is no communication of rights under patents for

inventions between the subjects of the two parts of the United Kingdom, and therefore the fact that the improvement invented by the appellant in Scotland had been previously used in England, is not a ground in law for invalidating the patent for Scotland. The power of the Crown in Scotland to grant exclusive privileges in respect of new inventions is not given by any statute, but is founded on the immemorial usage of the Crown and the acquiescence of the nation. The attempts made to stretch this prerogative beyond its just limits gave rise to the Act of Monopolies (Acts of Charles I., 1641), which was declaratory of the principles of the common law, but left the prerogative of the Crown untouched. The terms of the Scotch patents varied, some being for thirteen, others for twenty-one years ; since the union, the term prescribed by the Statute of Monopolies for England has also been adopted for the Scotch patents (Act of 1693, c. 12), but there is nothing to limit it to this.

The grants and the extent of the rights thereby conferred are as distinct since the union as before, each being confined to its own country ; and in this respect each part of the United Kingdom must be considered as a distinct, separate and independent country and jurisdiction relatively to the other ; for were it not so, but the kingdoms of England and Scotland are to be considered as but one country, all rights of patents for inventions should be co-extensive and equally effectual in both parts of the United Kingdom, a conclusion directly at variance with the acknowledged fact, since the patent for each country is strictly confined to that country ; the freedom and intercourse of trade referred to in the Articles of Union do not extend to such rights as patents in either country. Patents for invention are not the only rights as to which a similar distinction exists respecting the rights of trade, since by the Scottish statute in favor of the royal burghs, the exclusive right of importing all foreign commodities for sale is conferred on the merchant-freemen of the royal burghs ; and according to the legal construction of that statute, the word "foreign" must apply to England. But the case as to the rights under letters patent

for inventions is much stronger ; for letters patent are, in their nature, matters of private right, constituted by grant *ex speciali gratia* on the part of the Crown, and accordingly pass in Scotland under the seal appointed by article 24 of the Treaty of Union, to be kept and used in Scotland in all things relating to private rights or grants which have usually passed under the great seal of Scotland, and which only concern offices, grants, commissions and private rights within that kingdom. Further, letters patent are accompanied by no interchange of rights and privileges between the subjects of the two parts of the United Kingdom, but letters patent for one country are entirely confined thereto, and have no effect whatever in the other. But except in regard to such privileges and advantages of trade and commerce, as to which it was provided by the Treaty of Union that there should be full freedom and intercourse between the subjects of the United Kingdom, and for the regulation of which the laws were after the union to be the same in Scotland as in England, article 18 of the Treaty of Union expressly declares "that all other laws in use within the kingdom of Scotland do, after the union, remain in the same force as before."

It would appear to follow, therefore, that all questions touching the validity of letters patent for Scotland must be tried and determined according to the law of that country alone, and without reference to the legal condition of the subject-matter of such letters patent as to freedom or restriction in England, or any other country. The general requisites of the law of Scotland with respect to letters patent are the same as of the law of England, except as regards the limits of their respective jurisdictions ; but in applying those requisites, the matter must be considered solely with reference to the validity of letters patent in Scotland and the effects of rights arising under them in that country, just as if England had no connection with it.

2. Because, according to the just construction and true meaning of the letters patent granted to the appellant in Scotland, the requisite as to the novelty of the improvement is that it was invented in Scotland by the appellant ;

and there is no condition, expressed or implied, that the mere circumstance of its having been previously known or used in England should infer a nullity of the patent.

The parts of the letters patent material to advert to are the following: First, the recital of the petition, which, having stated the invention by the appellant, proceeded as follows: "Quam inventionem credit pro generali beneficio et commodo futuram esse, dictam inventionem novam esse et haud unquam ante hoc factitatem aut usitatam fuisse per ullam aliam personam aut personas quascunque intra hæ regna ut intelligit et credit." Then follows the prayer for the grant of the letters patent: "Intra illam partem Regni nostri Uniti Magnæ Britanniæ et Hiberniæ Scotiam vocatam pro termino quatuordecim annorum, secundum statutum in eo casu factum et provisum." The letters patent then proceed, in the usual form, to make the grant in the terms of the prayer: "Pro et durante termino annorum in præsentibus mentionato, tenend. et habend., etc., pro et durante spatio quatuordecim annorum et usque ad plenum exitum et terminum eorum a data præsentium proxime et immediate insequent." The letters patent then contain the prohibitory part, and the following among other provisos: "Proviso semper, etc., dictam inventionem quoad publicum ejus, in illa parte Regni nostri Uniti Scotia vocata, usum et exercitum non esse novam inventionem vel a dicto Jacobo Brown ut prædictetur non esse inventam."

The statute referred to in the petition is the English Statute of Monopolies (21 Jac. I., c. 3); but no conclusion can be drawn from this circumstance inconsistent with the appellant's argument as to the foundation of the law of patents in Scotland; for in the dispositive or granting clause, as well as in the *tenendum*, the limitation is simply *pro et durante spatio quatuordecim annorum a dato præsentium*, without any reference to the statute; whereas, in the form of letters patent for England, the *tenendum* contains there also the words "according to the statute in such case made and provided;" whether with reference to the term of years only, or generally to the authority on which the grant proceeds, may be doubted; but the latter con-

struction, if the true one, affords a strong illustration of the difference between an English and a Scotch patent, in regard to the foundation of the authority of the Crown in the two cases.

The insertion of the words *intra hæ regna*, so far as applicable to other portions of the United Kingdom different from Scotland, though perfectly consistent with the fact as regards the knowledge and belief of the appellant at the time, is superfluous and immaterial. And it appears on searching the register of patents, granted for Scotland during the last two years, the petition states the invention not to have been used in Scotland, according to the petitioner's knowledge and belief. And the proviso declares the grant to be void, in case it shall not be new within Scotland.

The court below has found that the simple fact of the invention having been used before in England is sufficient in law to render the grant void. There is no statement as to any previous use in Scotland; had this existed, the question would have arisen as to how far a misrepresentation in the petition in this particular would vitiate a grant, even supposing the invention to have been first introduced into Scotland by the party obtaining the grant. But this question does not arise.

The first condition of validity contained in the proviso is that the said invention be new as to the public use and exercise thereof within that part of the United Kingdom called Scotland. Without relying on the words "public use and exercise," it is clear that a thing invented in Scotland is a new invention in that country, although it had been previously invented and used in England. Under these circumstances the invention in Scotland, though not absolutely with reference to all the world the first invention, yet with reference to Scotland is a new invention. And this completely satisfies the condition of the patent, which only requires that the invention should be a new invention in Scotland. This view is supported by the words of the statute of James, which declares that patents shall be valid "of the sole working or making of any manner of new manufacture within this realm to the true and first inventor or

inventors of such manufactures, which others at the time of making such letters patent and grant shall not use ;" upon which it was held, in an early case (*Edgeberry v. Stephens*, 1 *ante*, p. 6), that letters patent for a thing practised in foreign parts, but granted to the person who introduced it into England, were valid.

The second requisite in the proviso is that the said invention shall have been invented by the said Brown. But if truly invented by him, which fact is not brought into dispute, the fact of its having been previously invented by another in England is clearly irrelevant. The same thing may have been found out by two persons in different countries simultaneously, or at different times, or an art formerly practised may have been lost, or a machine well known and used in another country wholly unknown here ; surely any person who, by the application of the powers of his own mind, shall restore the one or invent the other, is not the less entitled to the character of an inventor than he would have been if the art referred to had never been before known or the machine used elsewhere. And the advantages resulting to the inhabitants of Scotland from the invention are not lessened by the circumstance of its having been practised elsewhere before.

The court below were influenced in their decision by the case of *Roebuck v. Stirling* (1 *ante*, p. 12), for when the bill of exceptions came to be advised nothing more was said by any of the judges than that the case was a direct precedent, and that they were bound to decide accordingly. But that case differed from the present in various essential particulars, for the evidence was sufficient to establish the fact of previous user in Scotland, and this user was strongly insisted on ; also it was admitted that the invention had been practised by the patentees in secret many years before the patent, which circumstance was alone sufficient to vitiate the patent. The House of Lords in that case did not proceed on the one ground of the manufacture having been previously known and practised in England.

The respondents' case stated evidence of the prior public use of a manufacture or machine in England to be admis-

sible to establish the invalidity of a patent in Scotland for the same manufacture or machine, on the following grounds :

The appellant obtained his patent on the statement that he was the first and true inventor of his alleged improvements, and that the same had not been used by any other person at the time of making the letters patent.

The Scotch statute (Acts of Charles I., 1641) and the declaratory act (21 Jac. I., c. 3) settled the law as to the extent of the royal prerogative, and since the union of the two kingdoms the same law in regard to trade and patents has prevailed in both. For by article 6 of the Treaty of Union it is expressly declared "that all parts of the United Kingdom forever from and after the union shall have the same allowances, encouragements and drawbacks, and be under the same prohibitions, restrictions and regulations of trade, and liable to the same customs and duties on import and export ; and that the allowances, encouragements and drawbacks, prohibitions and restrictions and regulations of trade, and the customs and duties on import and export, settled in England when the union commences, shall, from and after the union, take place throughout the whole United Kingdom." And by article 25 it is enacted and declared "that all laws and statutes in either kingdom, so far as they were contrary to the Articles of Union, were to cease and become void." Thus there can now be no monopoly in relation to trade in England which would not operate also as a monopoly in relation to trade in Scotland. The laws regulating the trade of Great Britain are the same, and though when exclusive privileges are granted by the sovereign the forms necessary to be adopted in the two portions of the United Kingdom may vary, the law is nevertheless the same in both. And the prior use of a manufacture in any part of the United Kingdom must, therefore, render the exclusive privilege meant to be conferred by a patent of no avail anywhere within the limits of the United Realm or Kingdom.

Since the union there is but one realm, Great Britain ; one sovereign, to whom alone the subjects of Great Britain

owe allegiance, though the oath of allegiance may by law still be administered before the ancient judicial tribunals of the two kingdoms ; and in matters relating to the encouragements, prohibitions, restrictions and regulations of trade, there is but one law. The English statute of James is as much part and parcel of the law of Scotland as the act ratifying the Treaty of Union. A different interpretation would lead to the most injurious and anomalous results. On one side of the Tweed a particular plough may have been long in common use, and not on the other : is it consistent with the spirit or letter of the Treaty of Union that the lieges on both sides of the Tweed should not have the same protection in the use of the plough ?

England and Scotland are no longer foreign countries to each other in any sense of the term ; they are divided by no sea. And to the argument of the appellant in the court below that Scotland is a foreign country in regard to England in relation to patents, because a patent which had passed the seal in one country would not be thereby good in the other, there is this irresistible answer, that by the union of the two kingdoms the English laws in force at the period of the union, both as to revenue and trade, were communicated to Scotland. The communication of these laws was no difficult matter, but the mode of administering them, or any change in the courts or peculiar forms by which they were administered, was a different and more difficult matter. The nature of the land-rights of Scotland and many other obstacles rendered an absolute union of the two kingdoms next to impossible, and therefore the existence of separate judicatories and forms was indispensable. It might as well be said that the law regarding the revenue and trade in the two kingdoms was different because there are separate Courts of Exchequer, and separate boards of excise and customs, and for stamps and taxes. The law relating to patents is only a part and parcel of the law by which the trade of the United Kingdom is regulated, restrained or encouraged, though the execution of the law may be by the means of different courts in the two ends of the island.

If an invention be disclosed and made public in either part of the United Kingdom before both patents are sealed, neither is available. And accordingly, in practice, in order to enable a party to obtain a patent for both parts of the kingdom before the specification becomes due in either and the necessity for the publication of the invention arises, the period of enrolling the specification is enlarged.

A further argument against Scotland being considered a foreign country to England in respect of patents arises from the fact that a patent would not be granted on the application of an individual importing an invention from Scotland, not even from a foreigner residing in Scotland ; nor from a native of Scotland residing in France, because he would not be a foreigner.

Lastly, the case of *Roebuck v. Stirling* (*1 ante*, p. 12) is precisely in point ; and no adverse judgment of any of the courts in either country has been discovered. The practice of the legislature in extending letters patent for England for the renewed term to Scotland by the same statute, there being no patent for Scotland, shows these countries to have been considered as one in respect of patents. The respondents appended to their case the judgments of the Court of Session in Roebuck's case.

The case came on for argument in the House of Lords on February 24, 1842. *Pollock, Attorney-General*, and *Andrews* were counsel for the appellant ; *Kelly* and *Godson*, for the respondents.

Pollock, Attorney-General, described the questions to be considered as simply whether, according to the laws of England, Scotland and Ireland as they now stand with regard to letters patent for inventions, the condition of novelty inserted in the grants extends beyond those parts of the United Kingdom respectively for which the grants were made—that is, whether it is not sufficient that the invention be new, *quoad* the country for which the grant is made.

The appellant contends that all grants of this kind proceed from the prerogative ; that the statute of James regulating English patents was merely restrictive ; that these—

namely, English patents, as well as Scotch, derive their force solely from the prerogative, and not from any statute law. The only difference is that in England there is a restraining statute, in Scotland there is none ; each country is perfectly distinct. [Lord BROUGHAM. But if before the statute a person represented to the Crown that his invention was new, and not before used in these kingdoms, would not the grant have been equally void for misrepresentation ?] That might be. The proviso making the patent void is the same in English and in the Irish patents as in the Scotch ; the proviso regulates the extent of novelty in each, *mutatis mutandis*. It is no ground therefore to set aside the patent because it might have been used in some other part. I contend that the Crown has the same right to grant patents in Scotland as it had before the union of the two kingdoms. The act of James has no force whatever in Scotland. The Crown may annex what conditions it pleases to its grants ; they proceed solely from the prerogative. This prerogative is restrained in England, but it is not so in Scotland. [Lord CAMPBELL. But it has always been considered that article 6 of the union has made the law of Scotland the same as in England with reference to patents.] [Lord BROUGHAM. All English cases are cited in Scotch patent cases, just as in England. The leading cases are cited as law there as much as here.] It is immaterial to me whether the statute of James applies or not. My argument is independent of that entirely. Assuming that to be so, still the Crown of Scotland is in the same situation as respects granting patents as the Crown of England. [Lord LYNDHURST, L. C., and Lord BROUGHAM. Then you must contend, under the words of the proviso of section 6 of the statute of James, that any person importing an invention into Scotland from England is equally entitled to a patent as if he brought it from beyond seas.] I do ; Scotland is a foreign country as to England, for this purpose. [Lord BROUGHAM. But do you consider a man has the same merit who brings over a foreign invention from beyond seas, as if he merely brought it across the Tweed, from Berwick, for instance ?] I contend he is *quoad hoc*

the inventor. He may either call himself the inventor, or he may state the fact of his having first introduced the invention.

The question, then, is this : Is not the Crown entitled to grant a patent to an inventor, inventing or bringing an invention into Scotland, just the same as it can to an inventor in England ? [Lord BROUGHAM. The word "realm" in the statute of James of course meant England at that time ?] Yes, and still must mean the same ; and if it is to be subsequently applied to Scotland, it must mean the realm of Scotland only. [Lord BROUGHAM. That does not get rid of my difficulty. The petitioner states in his application that his invention has not been before used *intra hæ regna* these kingdoms ; he deceives the Crown, and the grant would be void, independently of the statute.] [Lord LYNDHURST, L. C. If the word realm means the United Kingdom, then the proviso in all English patents is illegal, and the consequence would be that every English patent would be void.] It would be so if such is the right construction. This shows, therefore, that each country must still be considered distinct for these purposes.

The court below has decided on the authority of Roebuck *v.* Stirling (1 *ante*, p. 12), and I admit that if that decision, as mentioned in the printed cases, is to stand good, I have not another word to say in support of the present appeal. [Lord LYNDHURST, L. C. There is no doubt, I suppose, that the invention was known in England before the date of the Scotch patent ?] Oh, certainly. But the patentee *bona fide* took out his patent without knowing that. He was certainly the original inventor in Scotland—that was not disputed. Now, there has been one uniform practice as to these matters ever since the union. There is no single case or trace of anything on the point in any single book, English or Scotch. I undertake to speak positively as to English books. It is the opinion also of all Westminster Hall, without one dissentient voice (and several most eminent opinions have been taken), that looking at the language of the patent and of the statute, the condition of novelty only applies to the country for which the patent is granted.

[Lord LYNDHURST, L. C. The words of the proviso are decisive, if they are justified by the statute. They are the same, I suppose, in English and Irish patents. How is it in the West Indies?—a patent for the colonies, I mean.]

[Lord CAMPBELL. These are granted either by including them in the English patent, or by an order in council extending the grant to certain colonies.] [Lord LYNDHURST, L. C. How is the practice as to obtaining the Scotch patents? Are they obtained simultaneously or afterward?] In both ways; if the petition for the English states an intention to proceed for the Scotch and Irish patents, an extension of time to enroll the specification is given.

[Lord LYNDHURST, L. C. It seems to me to turn on the construction of the act. The Crown can only grant a patent for what is new. The question is, where new?] You have evidence of the construction of the act in a long course of usage—I mean in the form of the proviso. [Lord CAMPBELL. But how can you apply "*hæ regna*" in the recital to Scotland only?] That phrase might well be used, as the sovereign speaks in the plural, "We, etc." [Lord BROUGHAM. Was it not, do you think, "*hoc regnum*" before the union?] [Lord LYNDHURST, L. C. It would be a monstrous thing if an invention, having full publicity in one part of the United Kingdom, could be made the subject of a patent in another part of it.]

[Lord CAMPBELL. If the Crown were made aware of that fact, the grant would be refused.] Is a uniform practice of two hundred years to be upset by a legal decision? It will be very doubtful, if it be decided that the proviso is too limited, whether any patent is good. [Lord LYNDHURST, L. C. It is a restrictive proviso less than the act authorized, no doubt, if we hold the act is to be so construed.] Then, if the proviso is bad, very great and serious doubts will arise if the patent is not bad altogether. The real question is whether a practical construction of the act shall be set aside merely by a legal decision, or whether it should not be by an act of the legislature, to be brought in for the express purpose, particularly considering the vast interests grown up under the supposed state of the law.

The decision upon which the court below proceeded—namely, the judgment in the House of Lords, in the case of *Roebuck v. Stirling*, in 1774, was on other grounds. [Lord BROUGHAM. “As well as for the reasons therein”—that is, in the interlocutors.] No doubt ; I must admit that refers to the reasons assigned in the interlocutor. I do not know if I may resort to the Scotch law of desuetude in this case. The statute has been entirely disused in this respect for above seventy years.

(The lords having consulted together, and referred to the printed cases in *Roebuck v. Stirling*, and to the journals of the House of Lords)— [Lord LYNDHURST, L. C. If we are to take that according to the letter, it is a distinct decision on the very point. It appears that Lord Mansfield was present as well as Lord Thurlow when the judgment was given.] [Lord BROUGHAM. It is quite clear that Lord Mansfield was there on purpose to take part in the case. He was not there on the day before or on the day after.] The lords having again consulted— [Lord LYNDHURST, L. C. I can readily understand why this form of letters patent was so framed before the union, and it has not been altered since, as it should have been.]

It is singular enough that the respondents in *Roebuck v. Stirling* never put their case on this ground ; so little did they expect to succeed on this point that they scarcely mentioned it in their reasons. [Lord CAMPBELL. It is raised distinctly.] [Lord BROUGHAM. They having taken two points, the House says, we form our affirmation on that ground as well as others.]

To what extent, then, are judgments of this House to be held binding ? Of course the House has the same power to review its judgments as the courts below have. [Lord LYNDHURST, L. C. They are binding on all inferior jurisdictions, but not absolutely binding on this House ; but it would require strong reasons for us to set aside a decision on the very point.] The true rule I take to be whether the decision is binding beyond the strict necessity of the case. If it be found applicable on other grounds, it is open to question. The reasons assigned form no part of the judg-

ment. The decision does not make the reasons assigned law. If the judgment be right, and clearly maintainable on other grounds, then it is open to me to re-argue the other points. [Lord LYNDHURST, L. C. This is part of the judgment of the House itself, the reason is made an essential part of the judgment. It is not the opinion of any single lord, on which he founded his judgment, but of the whole House.] It is clear that there was prior usage there, by the party himself, in Scotland. That was quite a sufficient ground, therefore, to set aside the patent and support the judgment. Another circumstance is that no costs appear to be given. This is evidence that the decision was not given on the ground taken. I come back to the circumstance that the practice has been uniform the other way for above two hundred years. This I contend is a practical construction of the act of Parliament during all that period. [Lord CAMPBELL. An English patent might remain good with the old form of proviso, notwithstanding the union, although a Scotch patent might not be so. I don't mean to say that that is so. The Crown would not then be deceived in its grant, and the patent void on that account.] No decision could be more inconvenient than that an English patent would not be vitiated by prior use in Scotland, although a Scotch one would by prior use in England ; this would not be putting the subjects of both countries on an equality. But article 6 of the union does not, in fact, apply to this case. It has nothing on earth to do with monopolies for inventions. There was a patent law in Scotland long before. It was precisely the same as in England, no statute before or since the union in any way affecting it. [Lord LYNDHURST, L. C. What is a form of a patent for a foreign communication ? If an inventor stated he has imported an invention from England not before used in Scotland, would he get a patent for it ?] I very much doubt, if it appears on the face of the patent that the invention was imported from abroad, if it would not be void. It was not formerly usual to state the fact of having imported it, but the applicant was called the inventor ; I believe they have lately put in the petition that he has brought the invention from

abroad. [Lord BROUGHAM (having read several passages from a Scotch patent for a foreign invention). This is very different from a patent for an original invention. It is not called his invention. It states the fact of his having received it from a certain foreigner residing abroad, and the proviso is different.] The question comes back to this : Has the Crown power to grant a patent in this form or not ? Did the Crown lose by the act of union the power to grant a patent for one kingdom separately from another as before ? If it be a good patent, the proviso makes it clear that no prior usage except in Scotland will vacate it. Every patent, both English and Scotch, is in jeopardy if this is not right. At least it will be extremely questionable whether a patent granted in a form not warranted by the act would not be set aside on scire facias.

Andrews followed on the same side. The respondents claim as of right to control the prerogative. They say the patent ought to have an additional or more restrictive proviso. [Lord LYNDHURST, L. C. If the proviso is made more extensive than the law authorizes, it would no doubt be void by the statute.] These are bargains between the subject and the Crown. [Lord LYNDHURST, L. C. But the Crown cannot make a bargain contrary to law.] But if the Crown had the power before the union, as part of its prerogative, it is well established that such prerogative could not be taken away except by express act of Parliament. [Lord LYNDHURST, L. C. No doubt the Crown had much greater powers as respects letters patent formerly, before the statute of James took it away.] Yes. It was restrictive of the prerogative and declaratory. I am willing to take it upon that. What effect is fairly to be put upon that restriction ? By the old common law the Crown clearly had a power to grant patents without restrictions (Noy, 178). The statute limits the Crown's power to fourteen years, and confines it to new inventions. The question then is, what is the meaning of the words, " which others at the time shall not use" ? Clearly others within the country for which the patent was to be granted. Within the realm, whether actually invented or brought into it, as in the case

of Edgeberry *v.* Stephens (1 *ante*, p. 6). In English patents, until very recently, no distinction was made between foreign and native inventions. The grantee was equally called the inventor. And this was the correct way of describing him ; I doubt if any other be legal ; in pleading, he could only be called the inventor. [Lord BROUGHAM. Have you any case you know to be a foreign invention where the common form is used ?] I have not ; but I can find no other form in any book on patents until the last edition of Mr. Godson's, where, in a note at the second page of the appendix, he for the first time mentions a difference in the form.

This statute refers only to England. There was no statute for Scotland whatever. The act of 1641, which has been alluded to, does not apply to patents for inventions at all.

It is admitted by the respondents that before the union the Crown had the power to make this grant, and any conditions in the patent must then necessarily have had reference to Scotland only. Then my argument is brought down to the consideration of the effect of the union. If it be conceded that the Crown had the power before contended for, how is the prerogative taken away ? It is a maxim that it can only be taken away by express act of Parliament. [Lord BROUGHAM. That is stated too generally. Take the case of the Crown's prerogative of issuing writs to summon members to Parliament at discretion, taken away by the effect of the union, and many other instances where the prerogative has been abridged inferentially.] [Lord LYNDHURST, L. C. Read also the recitals of the act of James, which have especial reference to the prerogative, and speak of the inconvenience of it.] The effect of the union was merely to extend a mutuality of rights, to apply the statute of James to Scotland, as if it had been passed in Scotland before the union. In that view "realm" will mean in England as before, and in Scotland, the realm of Scotland. [Lord LYNDHURST, L. C. Suppose the invention is found not to be new in the colonies ? It would be void, because they are part of the realm. All became one realm at the union—England, Scotland and the colonies.] [Lord

CAMPBELL. There is no separate patent for the colonies. It may be extended to the colonies as part of the realm.] The articles relied on are the 6th and 18th. By them it is argued the two countries are to be made one as to patents. [Lord BROUHAM. There are other general words incorporating them into one.] If so, the great seal would be used for Scotch patents ; if patents are public matters, then they clearly should pass under the great seal of England. If private, then they are expressly exempted by article 44 from the operation of the act. They always have been sealed under the seal of Scotland. Therefore they must be private matters. If not, one patent would run over both countries ; but in practice each is confined to the country it issues from. [Lord LYNDHURST, L. C. But patent rights surely affect the public. They may be given for part or for the whole realm. For England, for instance, without the colonies ; or for Scotland and not for England, and *vice versa*. They are distinct countries only as to the form and extent of the grant. The sealing has only reference to the form of the grant, and the officer who is to superintend the issuing of it.] [Lord BROUHAM. There might be a patent for one county only.] [Lord LYNDHURST, L. C. If a patent were granted for England and Jamaica, how would it be if it was found not new in Jamaica ; would it not be wholly void ?] It would no doubt be wholly void. [Lord LYNDHURST, L. C. If for England only, and it was not new in Jamaica, it would be equally void, because Jamaica is part of the realm. The question is as to the power of the Crown there, for it does not affect the words of the instrument. There is but one realm.] Then the word "realm" can only mean England ; if not, the Crown cannot grant a patent for England alone. The subjects of both countries would not be under one prohibition, etc., unless all patents extended to the whole realm. Every English patent would then be void. It cannot be one realm for one purpose and not for another. [Lord LYNDHURST, L. C. The party is at liberty to take out his patent for the whole realm, or for part of it, as he chooses ; or he may dispense with part of his rights, or not enforce them. There is a

dispensing power in the patentee.] [Lord BROUGHAM. I know no reason why the Crown could not grant a patent for all counties on this side the Trent. It would not be inconsistent with the statute so long as the invention was new all through the realm.] [Lord CAMPBELL. The effect of the union is to extend that clause of the statute of James to Scotland.] So it might, and yet leave the Crown in the same situation as to its Scotch subjects as it was in before toward its English. Thus there would be a perfect equality ; where could be the hardship of this ?

The reason given by Lord Chief Justice Clerk in Roebuck *v.* Stirling is that where there was a new manufacture introduced into England it would be hard if that new manufacture could not be introduced at once into Scotland. Suppose a manufacture to have existed in England for a number of years, and that the Scottish public had been inattentive to it, or should know nothing of it until brought to their own doors by some individual having introduced it under a patent ; is it fair that such persons should be told, You are not entitled to take out this patent ? [Lord CAMPBELL. The argument as to inconvenience is of no avail. The law may be with you, but no argument of inconvenience will help you.] Scotland is still a foreign country as to several matters ; bills of exchange, for instance. As to the other authorities cited— [Lord LYNDHURST, L. C. I must say that the authorities cited by the respondents, when compared with the cases, are not borne out. There is nothing before the House to justify the respondents' statements. There is a total misapprehension both as to the cases of Arkwright's and Tennant's patents.] As to Roebuck *v.* Stirling, it is quite clear that the House did not give judgment on this ground solely. [Lord LYNDHURST, L. C. How can we ever against the very terms of the judgment itself, which is on record in that case ? It is affirmed for one reason, as well as many reasons in the court below. Does not that terminate the question ? That decision has been pronounced, and it must be considered as binding upon us, unless you can show some very strong reasons indeed to the contrary ; so strong as to satisfy us

that the judgment was without foundation.] [Lord CAMPBELL. The administration of the law in Scotland is different in form from England. The *ratio decidendi* is often given. If the House of Lords had repudiated that reason, it would have so appeared on the journals. On the contrary, the reason is approved of. It appears to me it would be attended with great inconvenience and some absurdity if it were otherwise.] The question is one of the greatest importance, as there are a great number of patents in the same unfortunate situation as the appellant's; and very strong opinions have been given by most eminent lawyers that previous use in Scotland did not vitiate an English patent.

Lord LYNDHURST, L. C. As far as I am concerned, I feel bound by that decision.

Lord BROUGHAM. The case of *Roebuck v. Stirling* appears to me perfectly to decide this case. The Court of Session had dismissed the suit, because it appeared that the process in question was known to and practised by different persons in England. This House adjudged "that the interlocutors complained of be affirmed, for other reasons as well as the reasons specified therein." That implies that they concurred in the reasons thus given on the face of the interlocutor. What other reasons there may have been for the affirmance may be a question, but that reason was put forward by the court below as the ground of its decision, and being so put forward was at all events one of the reasons for the affirmance of the judgment, with other reasons not stated by the House.

Lord CAMPBELL. There is an express decision applying in its terms to the present, just as much as if other reasons had not been introduced into the judgment of the House. That being an express decision upon the point in question, unless it is shown that the House was under some great mistake at the time, it must be considered as binding. I entirely concur in the decision, I think it is perfectly right; and if it had been *res integra*, I should have so decided, but especially after that decision; I perfectly concur in the affirmance of the judgment of the court below. My opinion

is that the law was quite correctly laid down by this House in the year 1774.

Lord BROUGHAM. When I stated that I proceeded on the decision of this House in *Roebuck v. Stirling*, in the year 1774, I intended to have added that I should have so decided without that precedent. I entirely agree with my noble and learned friend that if this had been *res integra*, I should have so decided it.

Kelly and Godson, for the respondents. Your lordships purposing to affirm that judgment without hearing the respondents' counsel, we have to ask that it may be affirmed with costs, being directly in the face of a judgment of this House.

Andrews. No argument was allowed in the court below.

Lord LYNDHURST, L. C. Here has been a decision of a single judge, then of the whole court, as we think they ought to have decided ; and therefore I think the interlocutors must be affirmed, and the appeal dismissed with costs.

Judgment accordingly.

In the foregoing case the respondents relied among other authorities upon *Clark v. Laycock*, heard before Lord Mansfield April 25, 1776, in which, according to Lord Gardenston (see 2 Hailes Ct. of Sess. Decis. 569), the plaintiff's patent for both kingdoms, Scotland and England, was set aside upon the evidence of Scotch witnesses, that the art in question had been practised in Scotland before the patents were granted.

Webster, however (1 Web. P. C. 441), says it is extremely doubtful whether any such evidence was given in the case, and cites Lord Lyndhurst as having said in *Roebuck v. Stirling* that the respondents in that case were not justified in the statement that such evidence was there given.

In two cases, *Re Samuda* and *Re Griffiths* (Hindmarch, 585), each party was applying for a patent for an invention which had previously been made the subject of a specified patent granted to Mr. Samuda for Scotland ; and each party had gone through all the preliminary proceedings for obtaining a patent without opposition ; but when they came to the Patent Office each party was opposed by a caveat entered by the other. Each party then petitioned the Lord Chancellor to seal his patent ; and his lordship referred both petitions to the Solicitor-General to inquire and report whether the patents, or either of them, ought to issue. The Solicitor-General, after hearing counsel for each of the parties, reported that the invention had already been published in the United Kingdom (in Scotland), and therefore, according to the decision in *Brown v. Annandale* (above), it could not legally be made the subject of a patent, and that no patent ought to be granted to either of the petitioners. The petitioner

Griffiths being dissatisfied with the Solicitor-General's report, presented a second petition stating his exceptions to the report, and praying that his patent might be sealed. Lord Lyndhurst, L. C., held that the invention having been published in another part of the realm, it could not be made the subject of a patent privilege in England, and that neither of the patents could be sealed.

QUEEN *v.* NICKELS.

King's Bench, N. P., Feb., 1842.

(36 Mech. Mag. 141.)

Sufficiency of Specification.

A specification should distinguish what is new from what is old.
Parol evidence is not admissible to supply a deficiency in this respect.

Scire facias to repeal a patent.

The patent had been obtained for an invention intituled, "Improvements in machinery for recovering fibres applicable in the manufacture of braid and other fabrics." The defendant's specification commenced in the usual form, viz., by declaring that the nature of the invention and the manner in which it was to be performed were "described and ascertained in and by the following statement thereof, reference being had to the drawing annexed, and to the figures and letters marked thereon—that is to say, the invention relates "to certain improvements in or additions to the apparatus or parts constituting what is called braiding or plaiting machines, whereby I am enabled," etc. The defendant then proceeded to describe different kinds of braided fabrics which the machinery would produce, after which he proceeded as follows: "The construction of braiding or plaiting machinery, wherein all the threads partake of like movements, and all aid in forming the fabrics of plaited threads, being well known in the manufacture of braids, it will not be necessary to enter into a long description of the same. All that will be required to make the invention clear and enable a workman acquainted

with such machinery readily to perform my invention." It would be expected from this that the specification was about to declare what it is, which would be sufficient to enable a workman to perform the invention; but the sentence is not completed, the patentee merely proceeding to say immediately after the words "perform my invention," as quoted above, "which is only applicable to such machines as work with four or more heads or circular tables for actuating a system or series of bobbins," etc. The specification then proceeded to describe the uses of the machinery for making the various fabrics which it was intended to produce, after which it described the drawing annexed. The specification did, in fact, describe the whole of the machinery, including both the old parts and those claimed by the patentee to be new; but it did not in any part of it point out which of the parts were new and which of them were old. At the end of the specification the defendant stated that he made no claim to any of the parts of the apparatus constituting the machine separately, nor combined so far as the same had been before known; but there was nothing in the specification which could enable any person to ascertain to which of the parts of the machinery the disclaimer was intended to apply.

The counsel for the prosecutor objected that the specification was insufficient, because it clearly appeared upon the face of it that some parts of the machinery described were old, and there was no part of that document which either pointed out what was the new invention claimed by the patentee, or the old parts which he disclaimed.

For the defendant it was contended that he was at liberty to give evidence to show what was new and what was old.

But the cases of *King v. Wheeler* (1 *ante*, p. 317) and *Neilson v. Harford* (*ante*, p. 231) were cited to show that the construction of the specification was for the court and not the jury, and that such evidence was not admissible.

Lord DENMAN, C. J., adopted the language of Lord Ellenborough, in the case of *Macfarlane v. Price* (1 *ante*, p. 227), and said that the alleged improvements were not

sufficiently ascertained or described, either by words or by figures, and that the wit of man could not discover from the specification what was new or what was old, or what he was warned from doing. He also held that parol evidence was not admissible to explain the specification and to show what was new ; and he directed the jury to give a verdict for the Crown, which was accordingly done.

BAIRD v. NEILSON.

House of Lords, March 21, 1842.

(8 Clark & F. 726.)

License. Estoppel against Defence.

N obtained a patent for smelting iron by the use of heated air applied to furnaces. B obtained a license from him to use this process on the payment of 1s. per ton on the iron thus smelted. Litigation arose between them, and it was agreed by an instrument in writing, dated November 11, 1838, that both parties should withdraw their law processes ; that "in consideration of the present payment of £400 to be accepted by N in full of 1s. per ton on the whole iron smelted from the erection of B's works up to November 11 current, and in consideration of the payment of 1s. per ton upon the whole iron which shall be smelted from November 11 until the expiry of the letters patent, by the use of heated air in any of the modes heretofore applied, or in any other mode falling under the said patent," N should grant to B a license, which further on in the agreement was described to relate to "the application or use of heated air in any of the modes heretofore practised at B's works, or in any other mode falling under the description in the said patent, or in the specification thereof." N afterward instituted a suit to compel B to perform this agreement. B instituted a cross suit to suspend N's proceedings, on the ground that the process of smelting by heated air, used at B's works, did not fall within the patent. Held, that after this agreement B could not set up such a defence to the claim of N.

Appeal from Court of Session of Scotland.

James Beaumont Neilson, one of the respondents, on October 1, 1828, obtained letters patent for "an improved application of air to produce heat in fires, forges and furnaces, where bellows and other blowing apparatus are re-

quired." The other respondents obtained from Mr. Neilson a share of or interest in his patent.

An agreement was made granting the appellants license to use the invention in blowing their smelting furnaces at Gartsherry, for the term of the patent, they paying to the respondents "the sum of 1*s.* for every ton of iron smelted."

To terminate subsequent litigation between the parties, a new arrangement was entered into. This consisted of a license and contract, under which the appellants should discharge the process of suspension taken out, in which they disputed the validity of the patent, and denied that the mode pursued by them in the application of heated air to the smelting of iron from the ore at their works at Gartsherry fell under the invention. The respondents should, in consideration of the payment by the appellants of £400, to be accepted by the respondents in full of 1*s.* per ton upon the iron smelted by the appellants at Gartsherry, by means of heated air, until November 11, 1833, discharge the letters of horning raised by them against the appellants, and the process of suspension for having the appellants prohibited and discharged from applying heated air by means of the apparatus then used by them in the smelting of iron from the ore at their works at Gartsherry. The respondents also, in consideration of the payment of 1*s.* per ton upon the whole iron which had been or should be smelted by the appellants, from November 11 till the expiry of the term of the letters patent, by the use of the heated air in any of the modes heretofore applied, or in any other mode falling under the said patent, should grant the appellants a license to use the invention at the iron works at Gartsherry, in so far as applicable to the smelting of iron from the ore in blast furnaces. The appellants further bound themselves during the subsistence of this license, neither directly nor indirectly to challenge the validity of the patent, nor to suspend any charge that might be given for payment of the sums to become due from them, or for implement of the obligations hereby incumbent on them, so long as the said letters patent were not declared void and null under a penalty stipulated.

In 1840 the respondents again took proceedings in the Court of Session, calling on the appellants to render an account verified on oath of the number of tons of iron ore smelted by them under the license and by means of the patent process ; to produce all their books and accounts, and to pay to the respondents the royalty alleged to be due, and the penalty.

The appellants prayed a suspension of the charge, upon which the lords of the First Division of the Court of Session, on May 26, 1840, pronounced the following interlocutor : "The lords, upon the report of Lord Gillies, Ordinary, and having heard counsel for the parties, refuse the note of suspension, and find the respondents entitled to expenses ; appoint an account thereof to be lodged, remit the same to the auditor for taxation and to report, and to the Lord Ordinary to decern."

The present appeal was then brought.

Pollock, Attorney-General, and Kelly, for the appellants. There is no ascertained debt which can be claimed here by the process adopted by the respondents in the court below. The judgment of the court is therefore inept. Before deciding that the appellants were bound to pay for the use of the process, the court ought to have ascertained that the appellants had actually used it. They bought the permission to use it ; if they did not avail themselves of that permission, they are not bound to pay for it. The payment is to be in respect of the actual use of the process, not of the bare right to use it. The decree of the court below assumes that the process was fit for use, and was profitably used. No such assumptions ought to have been made. The respondents ought to have been called on to show the usefulness of their invention, and the fact that it had been employed by the appellants. The decree gets rid of both these questions, assumes both of them to be decided unfavorably for the appellants, and then, on that assumption, proceeds to direct the account. The appellants desired to show that the patent was invalid. This was refused them because of the agreement into which they had entered. But that agreement does not preclude them from impeach-

ing the patent ; for the respondents having in another suit sought to interdict the use of the patent to the appellants, the latter were entitled to show that it was not a patent that could be legally sustained, or could invest the supposed patentees with any rights to exclude iron-masters from the use of any particular process that they might believe to be advantageous. The whole proceeding in the court below is irregular, and must be reversed. The court has proceeded to a decree in law which is not justified either by the admissions of the parties, or the finding by a jury of the facts ; and the appellants have thus been deprived of defences to which they are legally entitled.

Follett, Solicitor-General, and *Anderson*, for the respondents. The precise terms of the contract of November, 1833, are binding on the appellants. By the proviso which declares that they shall not directly nor indirectly impeach the validity of the patent, they are prevented from taking one of the courses they now propose to take ; and without allowing them to violate the express terms of their own agreement, the House cannot permit them to obtain what they now seek. The terms of the agreement are equally conclusive as to their liability to pay. The principle of the patent was the application of heated air to blast furnaces ; and the agreement expressly stipulates that they shall pay 1*s.* per ton of iron smelted at their works, between November 11 and the day of the expiry of the agreement, " by the use of heated air, in any of the modes heretofore practised " by them, " or in any other mode falling under the description in the patent." Nothing can be more clear than these stipulations ; there is no pretence for showing that they were entered into through the fraud of the respondents ; they were knowingly and voluntarily contracted by the appellants, and they must be faithfully performed. The decree of the court below has merely directed the strict performance of obligations distinctly undertaken by the appellants, and is therefore in every respect a valid decree, and must be affirmed.

The *Attorney-General*, in reply. The appellants have a right to show that circumstances have arisen which have

rendered the agreement inapplicable ; and a decree which deprives them of that right is irregular, and cannot be sustained.

Lord BROUGHAM. My lords, I think in this case that your lordships can have no question that the interlocutor of the court below is well founded, and ought to be affirmed. The first question raised is upon the construction of this instrument ; and it appears to me, with great submission to your lordships, that there can be no doubt whatever of the true construction to be put upon the words in the instrument, "the number of tons of iron smelted in manner aforesaid ;" which refer of course to the previous description given of the mode of smelting used by the present appellant, the suspender below, which is described in the following words : "By the application or use of heated air in any of the modes heretofore practised by the said parties at their works, or in any other mode falling under the description in the said patent or in the specification thereof." Taking the whole of this instrument together, I think it is perfectly plain what the parties on either side had in view in the agreement. There had been great dispute between them before, turning upon two points, which two points I am sorry to say have been raised again, though this agreement was intended to have prevented their again raising them ; one on the validity or invalidity of the patent, and the other whether or not Messrs. Baird had in their works used the process of the patent. Now, in order to put an end, as it appears to me, for the future, to all such disputes, as well as to ascertain what was to be done with respect to determining the disputes as to the past, they appear to have agreed that, whether the process used by Messrs. Baird had fallen within the patent and specification or not, there was equally to be paid the specified sum. The words used are : "The modes heretofore practised by the said second parties"—that is, the Messrs. Baird, "at their works, or in any other mode falling under the description in the said patent or in the specification thereof." That is to say, that if the process continued to be used was the same

with the process previously used, they were to pay in respect of it, if it was within the patent ; or if, on the other hand, it was a departure from the process which had been previously used, and not falling within the patent, that still with respect to that process they should pay. Now, I cannot go along with the construction which gives such an effect to the word "or" as to construe this into a distinct admission of the party that the previous process was within the patent ; I think that it is used in a sense in which it is frequently though very inaccurately used. The words are these : "The modes heretofore practised by the said second parties at their said works, or any other mode falling under the description in the said patent or the specification thereof"—that is, any other mode, such mode falling within the description of the patent ; in other words, provided such other mode be a mode falling within the description of the patent. I apprehend that to be the true meaning ; though not certainly a very correct, yet not a very unusual application of the word "or." Such being the case, the question whether the process used by Messrs. Baird fell within the patent or specification or not became immaterial, provided it was a continuation of the process they had heretofore used.

When the charge is given upon these proceedings, and the bill of suspension is brought to suspend that charge, the question is whether or not the case made for that bill of suspension is sufficient to warrant the court in suspending the charge. Now, what have they pleaded ? Their statement and their plea really amount to this, partly that the patent was invalid, and partly that the process used by them was not a process within the patent ; which appears to be perfectly immaterial to the construction which I humbly think ought to be put upon the agreement,—that whether the process used was within the patent or not, still if it was a process previously used in those works, it was struck at, and they were bound to pay the 1s. a ton. It is true, the other part of the charge of the present respondents did not distinctly meet that statement in the bill of suspension in a manner the most correct and the most simple in

which it might have been met ; for it would have been much better if they had said, " You have stated an immaterial ground ; you have brought forward, on behalf of your bill of suspension, a wholly immaterial and irrelevant plea ; for whether the process used by you falls within the patent and specification or not is rendered immaterial by the obligation you have incurred by the instrument in question." Instead of that, they rather followed him into that immaterial plea, and negatived it. Instead of saying, " It is quite irrelevant," they have said, " Be it relevant or not, you are wrong ; be it immaterial or material, you were precluded from denying that your process is the process of the patent, because you have in that instrument admitted that your process was the process of the patent, and that the case depended upon that." Upon the true construction, as I conceive, of that instrument that would have been ill-founded, for I do not conceive they had so admitted ; but whether the charger is correct or not, they meet his allegation on what is really immaterial. The charger being possessed of that which may be considered a judgment, a registered instrument giving him a right to execution upon that registration, it is for the suspender to displace the diligence, to show the court that the charger has no right to avail himself of that diligence. He has not done that effectually, and consequently the charger has a right to use his diligence, the suspender having failed in his application to suspend that diligence.

LORD COTTENHAM. My lords, I am of the same opinion with my noble and learned friend. If the question had turned upon the words which are to be found in the license, without any recital, I should have thought that they clearly expressed the intention of the parties that the 1s. a ton was to be paid for all iron made by the process covered by the letters patent, or by any process which had been used by the party before the date of that letter of license. But when the recitals to that instrument are looked at, they seem to me to put that question beyond all doubt. It appears by the recital that a question had arisen whether the process heretofore used had been or not within the terms of

the letters patent ; and the agreement is that they shall terminate that contest which had arisen by paying 1*s.* a ton for iron "smelted by means of heated air in whatever way applied." That expression occurs twice in the recital : "The use of heated air in any of the modes heretofore practised by the said parties at their said works, or in any other mode falling under the description in the patent or in the specification thereof ;" and that was absolutely necessary in order to put an end to the contest which had arisen between those parties, which contest was, first of all, whether the validity of the patent was put an end to by this agreement ; and secondly, whether or not the process had been a violation of the patent. They agreed, for the purpose of putting an end to the contest, that this sum shall be paid on all iron made by means of heated air in whatever way applied. It does not actually amount to an admission that the mode used had been within the terms of the patent ; but it amounts to this, that for the purpose of terminating the difference, it shall be deemed as if it had been within the terms of the patent, the one being to pay and the other to receive the 1*s.* a ton. Then when the parties came to contract for the future, they say, "1*s.* a ton shall be paid for every ton made by means of the application of heated air in any of the modes heretofore practised by the said second parties at their said works, or in any other mode falling under the description in the said patent."

The terms I have now read are very explicit ; they seem to me to leave no doubt of the intention of the parties, who had agreed, as to the time past, to consider that all modes by which iron had been smelted should be subject to the payment of 1*s.* a ton ; and the same as to the future, that they shall pay 1*s.* a ton for all iron smelted in any manner according to the terms of the patent, or in any manner heretofore used, which for the purpose of this compact shall be equally subject to the 1*s.* a ton, leaving open the question whether that smelted before the contract of 1833 had been within the terms of the patent or not. When the parties find themselves subject to this agreement, they

apply to the court to protect themselves against what they consider an improper use of this process ; they state the ground on which they make that application ; the grounds are these : in article 11 in the statement of facts are these words, "That the complainers have been charged to render an account, verified by affidavit, of the iron smelted by them at these works by means of Mr. Neilson's patent, or by any mode falling under the description in the said patent or in the specification thereof ;" that is in affirmation of one part of the proposition contained in the contract between the parties by the agreement of 1833, but they leave the other untouched. That may be perfectly true according to the construction put upon the agreement, and yet they may have used this process before the contract of 1833, but which they now contend, as they did then contend, was not within the terms of the patent. That is not the averment, however, in the case. It is not therefore proving the affirmative of that, or assuming to prove the affirmative of that, which shows that they are not liable to the payment of 1*s.* a ton on all the iron made. That opens the issue again, which both parties intended should be concluded, that the process used before 1833 was the process which was covered by the patent.

My lords, what was the real intention of the parties making this agreement, whether they meant the words to have a meaning different from their obvious meaning, is a question not before us. The question is whether the appellants have stated anything entitling them to the interposition of the court ; for they must state, and they must clearly make out, a case entitling them to that interposition, otherwise the court cannot interfere. In my opinion they have not stated a case relieving themselves from the payment of the 1*s.* a ton for the iron so made ; and if there had not been a strange misconception of the agreement of the parties, I think there would have been no ground for the argument. The only difficulty I have had was in considering whether this process might not be used for the purpose of enabling the court to adjudicate between the parties as to what was to be paid, assuming that the iron had been

smelted in the mode subjecting the suspenders to the payment of the 1s. a ton ; but when I look to the statement of this case, I do not find any part of it in which the appellants call upon the court to protect them against the process, beyond the amount of the liability which arises from the contract to pay 1s. a ton. They state that they are not liable to pay anything, because the process they have used is not within the terms of the patent, and in one part of the appellants' case that is put in the strongest possible light. They say, " It is needless to go into these matters because the case of the complainers simply is that they could not be compelled, even in an ordinary action on the contract, and still less by a vague charge of this description, to render an account of iron smelted by a process which they aver and offer to prove they have never used." So far, therefore, from asking that they may have the assistance of the court to ascertain whether they are liable to pay the whole, the ground on which they put their case is that they have not used any process in respect of which they are liable to pay anything. That will leave it open to the parties to apply to the court for an interdict or any other process, as they may be advised. It is sufficient for us at present to say that on the ground upon which they have come here they have failed in bringing forward any case for relief from this agreement ; and upon a view of the whole case I think your lordships are justified in affirming the interlocutor.

Lord CAMPBELL. I entirely agree in the view thus taken by my noble and learned friends who have preceded me. I have very little to add to the observations they have made. The construction of the agreement does not appear to me to admit of any reasonable doubt. There had been a former license granted to Baird & Co., and they had made iron by means of a certain process. A controversy arose whether that mode of making it was an infraction of the patent or not, and whether they were liable to pay the sum they had stipulated to pay if they availed themselves of the license granted to them. It appears that there were legal proceedings arising out of that. To put an end to those, the

parties came to an agreement in 1833 ; and according to that agreement a certain sum of money was to be paid for the iron which had been before made by Messrs. Baird & Co., according to the process they had adopted ; and it was also agreed that a certain sum of 1s. per ton should be paid thereafter for all the iron which was made by them according to the mode they had before adopted, or any other mode which was within that patent. I am clearly of opinion that this precluded Messrs. Baird & Co. from contesting that their former process was not within the patent, and that it rendered them liable to pay 1s. a ton for all iron made according to the process whether within the patent or not. It would be monstrous to say that Messrs. Baird & Co., having paid the £400, might, if they continued the same process as they had used before, still contend that it was not within the patent, and that they were no longer liable, so as to revive all the controversy which it was the object of the agreement to terminate.

Then, what is the ground of the suspension ? It certainly lies upon the suspenders to state some ground on which they call upon the court to interpose to suspend the charge of having had the benefit of that process. The only real ground alleged is that the use that has been made of the hot air has not been according to the patent. There is no denial of their having used hot air ; there is no denial that it has been used in the same manner as it had been before 1833 ; but it is simply an allegation, and comes to this in substance, that it is not a use of hot air coming within the patent. But the very object of the agreement was to put an end to that question ; and on the construction of the agreement, I am of opinion that there is no ground at all for the suspension ; and further, that the suspender had no right at all to the interposition of the court, and that therefore the interlocutor disposing of that suspension ought to be affirmed.

Interlocutor affirmed, with costs.

LICENSE.—Not only a patentee, but also licensees from him, may recover in equity, damages for violation of a patent which has been established at law. *Beaumont v. George*, 1 *ante*, 206. An agreement to purchase license to use a

patent purporting to be a certain invention, may be set aside for fraud and misrepresentation. Lovell *v.* Hicks, 2 *ante*, 252. In patentee's action for an infringement, a licensee is a competent witness for plaintiff. Derosne *v.* Fairie, 2 *ante*, 78. A licensee cannot sustain an action for infringement of a patent. Derosne *v.* Fairie, 2 *ante*, 78.

HANCOCK v. HULLEMANDEL.

Chancery, V. C., April 12, 1842.

(38 Mech. Mag. 364.)

Upon conflicting Evidence, Injunction retained pending Action at Law.

Motion for an injunction.

In January, 1838, Charles Hancock, the eminent painter of animals, obtained a patent for "certain improved means of producing figured surfaces, sunk and in relief, and of printing therefrom; and also of moulding, stamping and embossing." The defendant Hullemandel in November, 1841, obtained a patent for "a new effect of light and shadow, imitating a brush or stump drawing, or both combined, produced on paper, being an impression from a plate or stone prepared in a particular manner, as also the mode of preparing the said plate or stone for that object."

In the present suit Hancock claimed that Hullemandel's "new effect" was obtained by means which were included within his (Hancock's) specification; and he now moved for an injunction to restrain this alleged infringement.

The portion of plaintiff's specification on which the plaintiff relied was as follows:

"I take a thin solution of caoutchouc mixed with etching ground or any other composition which will resist the action of acids, and with it cover the whole surface of the plate, and then with an etching point, or other suitable instrument, remove all the parts which are not intended to be in relief (or with the same or any suitable composition, draw or paint upon plain, curved or undulated metallic surfaces the whole

of that part of my design which I intend to be in relief), and when the drawing is perfectly dry I place it in a dish or trough of adequate dimensions, with its face downward, immersed to a proper and uniform depth in the acid liquor, which I allow to operate until the desired effect is obtained. Should any part require to be placed in higher relief, the plate, block or cylinder is to be washed clean with spirits of turpentine, and a ground laid on in the manner usually practised in relaying of grounds ; it is then to be submitted again to the action of the acid, or the part lowered with the graver."

Numerous affidavits from artists and men of science were produced on both sides ; but there was a great conflict of testimony as to the novelty of the inventions, and whether one was an infringement of the other.

The VICE-CHANCELLOR said that when the court found persons of such scientific knowledge in these matters giving the opinions they had, he was quite unwilling to take upon himself to say what they had stated was groundless, which he should do, to a certain extent, by granting the injunction in the present state of things. Therefore in the extraordinarily dark state of the case as it was now presented to the court, he thought the proper course would be to do nothing on the motion, but to let it stand over for the plaintiff to bring such action as he should be advised, to try the validity of his patent.

Counsel for defendant insisted that the application ought to be dismissed altogether.

The VICE-CHANCELLOR, in giving judgment, said he considered the case a very important one, and for that reason should follow the course he had already suggested. He wished to have it made absolutely certain whether there had been an infringement of the patent or not. If he were to act upon the present impression in his mind, it might happen that when the case came before a jury a verdict might be pronounced against that opinion, and then he should have, on a matter of fact, and not being at all conversant with the subject, an opinion he had pronounced on

the verity of the case contradicted by persons who were, by the law of the country, the constituted judges of disputed matters of fact. He therefore adhered to the opinion he had expressed that all he could do was to let the motion stand over for the plaintiff to bring an action, or otherwise to take such proceedings as he might be advised, with liberty to either party to apply.

GIBSON v. BRAND.

Common Pleas, East. T., 1842.

(1 Web. P. C. 681.)

Pleading Insufficiency of Specification. Patent for Process. Improvement. Novelty of All Parts of Process. Motion in Arrest of Judgment.

While a new process may be the subject of a patent, and an improved process may also be, if the improvement amounts to a new invention and a new manufacture, the specification must distinctly show the fact, and the evidence completely sustain it.

If the patentee claims as his invention improvements in machinery, or a new combination of machinery, and the jury find that he has only invented an improved process, *it seems* that the patent is void.

The patentees claimed eight several heads of invention. *Held*, that in order to support their patent they were bound to show that each of the parts was new.

To raise the question of the insufficiency of the specification in point of law, the defendant should, after setting out the specification and averring no other to have been enrolled, aver the letters patent to be void.

An issue in fact on a plea being found for the plaintiff, the defendant cannot resort to matters not in issue and admitted in that plea to arrest judgment.

Rule to show cause why verdict should not be entered for the defendants.

The trial at which verdict was entered for the plaintiffs is reported at p. 312.

Channell obtained a rule calling on the plaintiffs to show cause why the verdict should not be entered for the defendant on the second and third issues, or why there should not be a nonsuit, or why the judgment should not be arrested

on the fifth issue ; against which, cause having been shown, the court delivered the following judgments.

TINDAL, C. J. With respect to the question why the verdict should not be entered for the defendant upon the general issue, we have already in the course of the argument given a sufficient answer. The breach alleged in the declaration is that the defendant infringed the patent by making, using and putting in practice the plaintiffs' invention ; and the evidence is that an order was given in England, which order was executed in England, for making articles by the same mode for which the plaintiffs had obtained their patent, which articles were afterward received by the defendant. This is quite sufficient to satisfy an allegation that he made those articles ; for he that causes and procures to be made may be well said to have made them himself.

With respect to that part of the rule which calls on the plaintiffs to show cause why the judgment should not be arrested, I am of opinion that no sufficient ground has been made out for that purpose. It is to be observed that the last plea contains an allegation that there was no other specification enrolled by the patentees than that which is set forth in the plea. Then it goes on to allege that the specification is not sufficient, on which there is an issue taken in fact that it was sufficient. The parties go to trial upon it, and the jury find that it was a sufficient specification, meaning sufficient in point of fact, that a workman of competent skill and ability, pursuing the directions in the specification, would understand them very well, and might produce the result which the patentees intended. That is, therefore, a plea which is put in to the whole of the declaration, and the issue joined on it is found against the defendant. I have heard no authority cited to show that where a plea is found false in fact the defendant may afterward avail himself of another part of the plea, which was not put in issue, and on the allegation that the facts alleged in that other part of the plea are before the court, arrest general judgment for the plaintiff. If the defendant had

intended to avail himself of the want of a proper specification in point of law, or to have contended that such specification would not support the patent which had been granted to the plaintiffs, he might, after alleging that such was the specification, and that no other specification had ever been used or filed by the plaintiffs, have stated in his plea that the patent was therefore void in law; and then the question would have been raised upon the record, on which, if the defendant was wrong in his allegation, he would have been compelled to pay costs to the plaintiffs upon a demurrer, or if the defendant was right, he would have received them upon judgment being given in his favor. But now, after having put in a plea which goes to the whole right of action, which plea is found to be false in fact, upon an issue raised upon it, he seeks to use that plea—a confession in that plea—not merely for the purpose of the plea itself, but as a general answer to the right of the plaintiffs to recover. I observe the plea contains two allegations, one of which is that this was the only specification that was put in by the plaintiffs; and another is that it is not a sufficient specification for the purpose. True it is, when an issue is taken by the plaintiffs on one of those allegations, they do admit the other, viz., that it was the only specification; but then they only admit it for the purpose of that plea, and the defendant has no right afterward to use it as an argument against the plaintiffs that they have virtually admitted, for all the purposes of the action, that there is no other specification than that which is put upon the record. I think, therefore, upon the strict legal notion of a motion in arrest of judgment, which proceeds upon the ground of a deficiency in the plaintiffs' right of action, that the defendant has no right, under the circumstances, to call upon us to stay the judgment of the jury; and it is enough to say that on motion in arrest of judgment, the matter ought to be made out clearly to the satisfaction of the court, because, if they are wrong upon it, the party has a remedy in a higher quarter.

I come now to that which is the main and important question between the parties—that is, whether the defend-

ant has, upon the finding of the jury, the right to have the verdict entered for him upon the second and third issues. The second issue in this case is "that the plaintiffs were not the true and first inventors;" and the third issue is "that it was not a new invention at the time of the letters patent." The jury gave in this finding: "That the invention is not new, but an improved process, and that it is not a new combination." They do, therefore, according to the plain meaning of these words, first find there is no novelty in the invention, that there is no new combination, and that there is no novelty in the process, but an improvement only. The question is whether, upon this finding, supposing it to be supported by the evidence in the cause, the jury have found these issues for the plaintiffs or for the defendants; and it appears to me that the verdict ought to be entered upon these issues for the defendant.

Let us see what the patent is taken out for, and then what it is the plaintiffs in their specification have declared to be the nature of their discovery. The patent is taken out "for a new or improved process or manufacture of silk, and silk in combination with certain other fibrous substances;" taken out, therefore, strictly for a process. On the present occasion it is not necessary to go into the question (upon the view I take of this specification) whether a patent can be granted for a process, in the strict and proper sense of that term, or not. Undoubtedly there is a very strong reason to suppose, if the specification is carefully and properly prepared, so as to point out with great distinctness and minuteness what the process is, that such a patent may be good in law. Such certainly was the opinion of Eyre, C. J. (*Boulton v. Bull*, 1 *ante*, pp. 59, 85), and such also appears to have been the opinion (carefully guarding against any abuse of that doctrine) of Lord Tenterden (*King v. Wheeler*, 1 *ante*, p. 317), who says that "the subject-matter of letters patent, *i.e.*, the word 'manufacture' as used in the statute of James, has generally been understood to denote either a thing made, which is useful for its own sake, and vendible as such, as a medicine, a stove, a telescope, and many others, or to mean an engine or instru-

ment, or some part of an engine or instrument, to be employed either in the making of some previously known article, or in some other useful purpose, as a stocking-frame, or a steam-engine for raising water from mines ; or it may perhaps extend also to a new process to be carried on by known implements or elements, acting upon known substances, and ultimately producing some other known substance, but producing it in a cheaper or more expeditious manner, or of a better and more useful kind." And then he goes on to observe that the specification of a patent or a process should be definite and precise ; that as to a process, the specification should state the time and degree of heat, or other particulars, that would apply to the particular subject-matter under consideration. Now, looking at the specification in this case, it appears to me that this patent cannot be supported at law, because the plaintiffs have in the course of it claimed more than they are entitled to ; for I cannot read the description that they give of their invention, and the parts of their invention, without understanding them to claim improvements that are made upon the machine which is used for the purpose of producing the desired result. Dismissing all the different heads of process from our consideration but the sixth and seventh, I cannot understand those two articles or heads of the process, when I consider the other parts of the specification, but as claiming either an improvement upon or a new combination of the throstle machine, by which the work is carried into effect. That the plaintiffs mean to claim those eight several and distinct parts of the process, according to the argument of my brother Bompas, as all combined together making one process, I think is abundantly clear from the last words of the specification, where they desire it to be understood that they " disclaim those parts of the process or mechanism which may have been, previously to granting our patent, well known." And then they go on to say, " But we restrict our claims to the eight several heads of invention mentioned in the early part of this specification, all of which we believe to be new and of great public utility." Therefore it is that the plaintiffs are

bound to show that each of those eight several distinct heads into which they have divided the process is new and of public utility. The specification begins first to describe the old method of working the silk waste ; and then it goes on to say, " Having thus explained the old or ordinary process of converting silk waste into yarn, I will proceed to describe our novel process, by which we produce our new or improved manufacture of yarn or thread." Claiming, therefore, as they must claim, a novelty in the case, whether it be a patent taken out for machinery or taken out for a process only, if we were to stop there, when the jury have found that there was not a new process, but an improved process, although perhaps it would be a hard measure upon the plaintiffs, who call their manufacture " our new or improved manufacture," still, I think, there might be some doubt even upon that finding, with those words alone in the specification, whether it could be supported. Further on, after describing some portion of the process and machinery, the specification proceeds thus : " Having now explained the nature of the drawing and roving machinery which we have found to answer best, and the several processes of drawing and roving silk waste alone, and of silk waste in combination with wool and with flax, I will proceed to describe the spinning machine, by which the rove is drawn or elongated into strands to be spun into yarn or threads." Now observe, he is about to describe a piece of machinery ; he says, " The annexed drawings for the most part represent the well-known spinning frame, called a throstle, on the principle of the long ratch, as employed in the spinning of flax." " For the most part represent it." What is that but impliedly saying, " There is some part of that which I use, and which I am now about to describe, which is new and discovered by myself "? And he goes on, " Which machine, combined with the improvements we have applied to it, we apply to the new and useful purpose of spinning silk waste of long fibres." Now, pausing there only, I think it is impossible to read this without seeing that the party, who is now describing one of the heads of the process before set out, is claiming either a new improve-

pressly negatives. It seems to me that in order to sustain the issue that this was a new invention, the plaintiffs were bound to show that it was new in each of the eight parts which are set out in the specification and which are claimed as parts of their process. Unless each of them were new, the plaintiffs would not, in my judgment, be entitled to a verdict. I am not prepared to say that an improved process may not be the ground of a patent; and if the jury, therefore, had simply found that it was an improved process, and had found no more than that, I should at least have been under some difficulty in saying what the effect of such a verdict would be. But the finding of the jury must be taken altogether, and then it amounts to this,—that though there may be some improvement in the manipulation or otherwise in the process by which this matter is carried on, there is neither novelty in the invention nor novelty in the combination. Looking therefore at the verdict only, it seems to me a verdict in favor of the defendant upon the third plea. But we may look into the evidence for the purpose of seeing whether it was probable that there really was such an improvement in the process as might by reasonable construction amount, in the eye of the law, to a new invention; because if it had been so, I should have thought that might be a ground for sending the case down again to a new trial. And looking at the evidence with this view, I am not able to find any novelty in the process which would warrant us in saying that the jury must have meant, by finding it to be an improved process, that it amounted to anything which might properly be the subject of a patent. It seems to me to be nothing more than the application of an old and well-known machine, without any material variation, to the spinning of silk waste, in what we may call the natural state, discharging the gum from it in the ordinary manner, and dyeing it by the ordinary process. The only thing in which there is any novelty, that I can make out, is that the plaintiffs do not cut the silk into small and minute portions, that they dye it in a different stage of the process, and that they appear also to discharge the gum in a different stage of the process, but altogether

are against the plaintiffs, according to the terms in which the issue is couched, yet that, in point of law and substance, it is a finding in their favor, and therefore that the verdict may still be entered for them ; and the way in which I understand the case to have been argued is this—that looking at the evidence which has been given at the trial, and comparing the evidence given with the finding of the jury, the court may see the jury have in some sense found that the plaintiffs had discovered an improved process in the manufacture of silk yarn, and that the evidence shows that the nature of the discovery was such as would entitle them to a patent ; and therefore that the mere language of the finding by the jury was not such as to exclude the plaintiffs from the verdict upon those issues. Now, it appears to me, upon comparing the finding of the jury with the evidence given in the cause, that the plaintiffs have not made out any such case of an improved process as would entitle them to a patent as the inventors of a new manufacture. Although it may be true that a party may have a patent for an improved process, under circumstances which would show that the improvement in the process really amounted to a new invention, and a new manufacture within the terms of the act of Parliament, I think the evidence in this case does not show that here there has been any such improvement. The plaintiffs by their specification put their claim under eight heads, and inasmuch as they claim a patent in respect of the whole of those eight heads as forming eight different branches of one process, for the purpose of manufacturing silk yarn, or silk yarn in combination with wool or flax, it is necessary for them to show that the whole of that process is, as they maintain it to be, new. Now, it appears to me, whatever degree of novelty there may be in the process by which they discharge the gum from the silk, which varies from the ordinary process, inasmuch as it takes place at a different stage of the manufacture from that at which it was previously employed, or whatever novelty there may be in the dyeing, to which the same observation applies, yet if the substantial parts of the alleged improvements, as contained in the other heads of

the process, are not new, so as to make them the subject of a patent, then the plaintiffs must fail altogether. Now, the third head is, "A part of our process by which we spin yarn from dressed or heckled silk waste of long fibres, either in the gum or discharged." The third head, therefore, does not include either of the first two, because it is put in the alternative—"silk, either in the gum or discharged." What, then, is the novelty of the process claimed by the plaintiffs as proved in evidence in respect of this third head? It appears from the evidence that the process of spinning silk waste without cutting it had been previously practised—practised, it is said, in secret, and not made known to the public; and if that had been made out, I should have agreed with the learned counsel for the plaintiffs that that would not have been enough. But it appears to me that there is abundant evidence to show that the yarn spun from silk waste in the uncut fibre had been manufactured to a considerable extent, and had been brought into public notice by sale, and after sale had been used for different purposes, though it appears not to have been brought to that state of perfection which would enable parties to apply it to the manufacture of articles, such as those that were produced from the silk yarn made by the plaintiffs. It had, for instance, been used in the manufacture of gold lace. There was, therefore, nothing new in the process of spinning silk yarn from silk waste, in the long fibre, nor in the machinery upon which it was spun. And all that can be claimed by the plaintiffs is that they have more skilfully adapted a known machine to the preparation of materials previously known, by a process previously known, and producing a known result, but still producing that result in an improved condition. This appears to me the extent of the discovery and of the merit of the plaintiffs' invention. Now, this may be useful, as the jury have found it is; it may be valuable; but it is not the improvement which the plaintiffs have described and claimed in this specification. I am therefore of opinion that the verdict should be entered for the defendant on the second and third issues.

CRESSWELL, J. I am also of opinion that the verdict

should be entered for the defendant on the second and third issues. This patent right, as explained by the counsel for the plaintiffs, is undoubtedly of a very singular character. The plaintiffs do not claim any article produced by the process, they do not claim the machinery used in producing it, nor do they claim any ingredient used in producing it. They claim, it is said, merely a process. Certainly, there are dicta in the books that a process may be the subject-matter of a patent. Whenever that question arises, of course, I shall be prepared to give it every consideration, and form the best judgment I can upon it. I may remark, however, that I do not find any distinct decision, stating that the mere omission of a part of a process which this in substance is, would form sufficient subject-matter for a patent right. I do not propose, in considering the question now before the court, at all to inquire into the nature of the evidence which was given in the cause. The jury have come to a finding, against which no complaint has been made. It appears that both parties are content to say that the jury have really come to the right conclusion, and that they have found certain matters, which the parties on the one side and on the other contend to be in substance a finding for them. The jury have found that it is not a new invention nor a new combination. Have the plaintiffs claimed by their patent a new invention or a new combination ? If they have, then the jury have said there is neither ; and if they have claimed a new invention, and the jury have found there was none, of course they could not be the inventors. Now, if there could be any doubt that the plaintiffs intended to claim each of the eight parts mentioned at the beginning of the specification as a portion of their invention, they fix it by the concluding part of the specification, where they say, " We desire it to be understood that we disclaim those parts of the process or mechanism which may have been, previous to the granting of our patent, well known ; but we restrict our claim to the eight several heads of invention mentioned in the early part of this specification, all of which we believe to be new and of great public utility." Now, do they claim any mechan-

ism? I apprehend it is quite clear that they do. The sixth head of invention may be doubtful as to its meaning. I have considerable doubt in deciding whether they mean in that head to claim the throstle machine as part of their invention, or whether they merely use the throstle machine for the purpose of spinning this article when prepared in this particular mode; and if any question were clearly before the court as to the validity of this specification, whether it ought not to be held void as being too ambiguous in its terms (for every party is bound to tell the public clearly by his specification what he claims, and what they may do, or not do, without risk of an action for infringing his patent), I should certainly have been disposed to think that it would be difficult for the plaintiffs to get over that objection to that part of their specification. But in the seventh head they distinctly claim certain improvements effected in the throstle machine; and in describing the drawings they say, "They represent the well-known spinning machine called a 'throstle,' which machine, combined with the improvements we have applied to it," etc., clearly claiming certain improvements in it as their own; and again, in the concluding part, "We disclaim those parts of the process or mechanism which are old," thereby again claiming some of the mechanism as new. Now, the jury have said there is no new invention. This finding is equally fatal to the plaintiffs, whether they meant to claim the whole machine as improved, or parts of it only. Again, do they mean to claim a new combination of the parts of the machinery? If they do, the jury say there is no new combination. It is perfectly clear to my mind that they have claimed some new mechanism, some portion of the machinery used for the purpose of producing this manufacture, or carrying on this process, whatever they please to call it. This the jury have distinctly negatived; there is no doubt on the meaning of the terms they have used; and I think, therefore, these two issues must be found for the defendant. And this makes it immaterial to inquire what was the meaning of the jury in finding that there was an improved process; whether they meant that the differ-

ence in the stages through which the work was carried was an improvement, or whether they found that the plaintiffs carried the works through those stages which were previously known in a better manner, is quite immaterial, because, whatever may be the improvement of the process, it does not relieve the plaintiffs from the difficulty of having claimed this as a new invention, or combination of this machinery with other parts, which the jury have distinctly negatived. The rule, therefore, for entering a verdict for the defendant on the second and third issues must be made absolute, and the plaintiffs' rule must be discharged.

Rule absolute.

WALTON v. BATEMAN.

Common Pleas, N. P., May 13, 1842.

(1 Web. P. C. 613.)

Requisites of Specification. Completeness of Description. Utility. True and First Inventor. Prior Public Use. New Manufacture. What constitutes Infringement. Notice of Objections. Questions of Law and Fact.

The party obtaining the patent must be the true and first inventor in his country. If he import from a foreign country that "which others at the time of the making of such letters patent and grants did not use," it will suffice.

An objection to the novelty of an invention gives rise to two questions : 1. Was any article made before, answering the purposes and having the properties of that patented ? 2. Whether the user of it was not to be regarded as an experiment rather than a public use.

Proof of want of utility is not admissible under a plea denying that the invention is a new manufacture.

If a patentee knows a better mode than that which he states in his specification of carrying out his invention, his patent is void.

It is a question for the jury whether the patentee has given such a description of his invention and of the manner of carrying it out as will enable a workman of competent skill in that line of business to act upon it.

The doing any of the acts specified in the prohibitory clauses of the letters patent is an infringement. The defendants are not to resemble or counterfeit ; they are not to make any addition to or any subtraction from it, availing themselves of that which is in truth the subject-matter of his patent ; so as by such alteration to pretend that they are the true inventors of that article.

The notice of objections should be drawn with reference to the pleas, or notice given of the pleas to which the objections are to be applied.

Trial of action for infringement.

The patent is described in Walton *v.* Potter (*ante*, p. 162).

The declaration was in the usual form, and the pleas were, 1. Not guilty. 2. That the invention was not a new invention as to the public use and exercise thereof. 3. That the invention was not a new manufacture within the meaning of the statute. 4. That the plaintiff did not in and by the said specification particularly describe and ascertain the nature of the said invention, and in what manner the same was to be performed. 5. That the said invention was unfit and useless for sheet cards and top cards.

The notice of objections was a repetition of the pleas, and also various other grounds, some of a general and others of a specific nature, upon which the defendants intended to rely.

Wilde, Bompas and *Addison* were counsel for the plaintiffs; *Follett, Solicitor-General, Talfourd, Channell, Cowling* and *Cardwell*, for the defendants.

Some of the cards, sold by the defendants and alleged to be an infringement of the plaintiff's patent, were made according to the plan described in the specification of Potter and Horsfall's patent (see Walton *v.* Potter, *ante*, p. 162), which had been the subject of the preceding action; and others of the cards, as to the fabric into which the teeth were set, or the back of the cards, were manufactured in the manner of the Macintosh waterproof cloth, a thin film of india-rubber or caoutchouc cement being spread over cloth, and five or more cemented surfaces of such cloth being placed and pressed so as to adhere together. (See Macintosh *v.* Everington, 1 *ante*, p. 195.) The general nature of the evidence will appear from the following portion of the summing up of the learned judge.

CRESSWELL, J. This is an action in which the plaintiff seeks to recover compensation in damages for an alleged infringement of his patent right, and before I proceed to

read over to you the mass of evidence, I will endeavor to point out the law upon the subject of patents and the manner in which the various questions are raised on this record. Patent rights, or rather monopolies, having for a considerable time been a subject of contention and complaint in this country, in the twenty-first year of the reign of James I. an act of Parliament was passed to put down monopolies, and to enact that all parties should be disabled from using monopolies except in certain instances ; and in the sixth section it was thus enacted : " That any declaration before mentioned shall not extend to any letters patent and grants of privilege for the term of fourteen years or under, hereafter made, of the sole working or making of any manner of new manufactures within this realm, to the true and first inventor and inventors of such manufactures, which others at the time of the making of such letters patent and grant shall not use, so as also they be not contrary to the law nor mischievous to the state by raising of the prices of commodities at home, or hurt of trade, or generally inconvenient." The power of the Crown, therefore, to grant a patent is limited to such cases as are within this, which is in the nature of a proviso on the more general clause. The power is to grant the " sole working or making of a new manufacture," therefore there must be a new manufacture, " to the true and first inventor." The party obtaining the patent must be the true and first inventor in this country. If he import from a foreign country that " which others at the time of the making of such letters patent and grants did not use," it will suffice. Now, that has been held, as I shall point out to you more particularly by and by, to mean a user not by way of experiment, but a public user ; in distinguishing which, the knowledge of the parties as to the article in use will be material for your consideration. Then, it is not to be " contrary to law or mischievous to the state." Now, there is no plea upon this record stating that this is contrary to law or mischievous to the state. In one shape the question of its being contrary to law is raised, because it is alleged not to be a new manufacture, and if not a new manufacture it would be

contrary to law. But what is or what is not a new manufacture in that sense, excluding the consideration of who is the first and true inventor, whether it is a manufacture within the meaning of this act, I apprehend to be a question of law ; and that question, as far as I can, I have disposed of in this case, and I am happy to think that, if it is of any importance to the parties, and if they think they can successfully controvert the opinion I have expressed upon that point, they will have the opportunity of carrying it to the highest court in the kingdom, provided your verdict should make it necessary for them to do so.

Now, the plaintiff represented that he was the first and true inventor of "improvements in cards for carding wool, cotton, silk and other fibrous substances, and for raising the pile of woollen and other cloths." That is the thing he professes to have invented—"certain improvements." That is the patent. The patent says nothing at all, nor is it necessary it should, about the particular nature of his improvements, and still less about the means by which he carries those improvements into operation. The patent grants this—"that no person shall at any time during the continuance of the term of fourteen years hereby granted, either directly or indirectly make, use or put in practice the invention, or any part of the same ; nor in any wise counterfeit, imitate or resemble the same ; nor shall make or cause to be made any addition thereunto, or subtraction from the same, whereby to pretend himself or themselves the inventor or inventors, deviser or devisers thereof, without the license, consent or agreement of the said James Walton." Therefore, they are not to resemble or counterfeit ; they are not to make any addition to or any subtraction from it ; availing themselves of that which is in truth the subject-matter of his patent ; so as by such alteration to pretend that they are the true inventors of that article. Now, the defendants, in the first place, say that they are not guilty ; that is, they say they have not directly or indirectly made, used or put in practice the invention or any part of it—that they have not counterfeited, imitated or resembled the same, nor made or caused to be made any addition thereunto or sub-

traction from the same, whereby to pretend themselves to be the real and true inventors. The defendants deny that they have done any part of that, and if you find that they have, then the first issue must be found for the plaintiff. They next plead "that the alleged invention was not nor is a new invention as to the public use and exercise thereof." It is right I should direct your attention now to a subsequent statute, which was passed for the protection of patentees, because it was found that when actions were brought for infringements of patents, objections were frequently started by surprise upon the party, which he might have been prepared to meet if he had had due notice of it, but which, not having had that notice, he could not meet; and so it was supposed injustice was sometimes done to patentees, and an act of Parliament was accordingly passed which provided that a defendant in such an action, intending to avail himself of objections to the patent, should at the time of pleading give a notice of the nature of his objections; and I cannot help thinking, after reading carefully the notice of objections given in this case, that it would be a very good rule to establish that, with the notice, the party should be compelled to say under which plea he means to bring forward the different objections; for I protest, looking as carefully as I can at these objections, I have had very great difficulty in knowing how the defendants mean to apply them, and I fear that in this case, and in others, objections so drawn, without any such specific statement as to the plea under which they are to be given in evidence, instead of serving to help us in the due administration of justice, may serve as traps and pitfalls for judges and juries to be caught in. Gentlemen at the bar will do the best for their clients, but I think it would assist the administration of justice if the parties had distinct notice how the objections were to be applied.

With respect to this not being a new invention, the nature of that objection is distinct and clear upon the face of it. It involves two questions for your consideration. First, was any article made before answering the purposes and having the properties of that which the plaintiff has made

patent being for giving an elastic bed to the teeth of cards by the application of india-rubber? Would any person buying Hancock's patent leather suppose he was buying that? The patent itself distinctly shows, according to the chemical evidence we have had, that such an article could not be produced by that patent; that if that patent were applied to the manufacture, it would destroy the elasticity of the india-rubber, and such an article could not be produced by it. Therefore, if they supposed that they were buying that article, made under that patent, they certainly could not suppose that they were buying an elastic bed for the teeth of their cards. Were they, in fact, buying an article of that sort, and how do they attempt to show now that they were? That will be for your better judgment, but it seems to me by a very singular sort of evidence. They have called several gentlemen before you who prove that, by analyzing small portions of it, they find certain ingredients. They find in the inner cloths india-rubber as a cement for the cloths. But they find something on the outside also. The cloth was composed of the one as much as of the other; and they do not tell you what was the effect of the whole upon the card. They are not asked. Now, if we are to take it as an article made under Macintosh's patent, the inner cloths might be cemented according to Macintosh's patent; but was the article when turned out as patent leather an article made under Macintosh's patent? What had Macintosh's patent to do with that coloring matter which was on the outside—the ochre, the oxide of iron and the carbonate of lime? However, what did these people suppose they were purchasing? There is a curious fact about that, that Hancock himself does not appear to have known what he was selling, because he states he said, at the last trial, and believed he said truly (of course we must take it that, at the time he was stating it, he supposed he was stating truly), that that article was made according to his patent, and he says, "I have discovered since by accident (and I now have a memorandum book showing the manner in which I made out my invoice to Mr. Hemming-way, who bought it) that it was not made according to my

and firmness. Then they go on to say that the letters patent granted to Hancock are expired, and that it is now the common right of every subject to use india-rubber, and its solution or cement, combined with cloth or any other fibrous substance, in any way, for any purpose to which leather before the grant of that patent had been commonly applied. Hancock's patent never prevented that, therefore that consequence does not follow from the expiration of Hancock's patent. But, as has been said, I think, with great propriety by the learned counsel for the plaintiff, if they like to make card-backs according to Hancock's patent, let them. The plaintiff does not object to their doing that.

Then the defendants further say that the plaintiff did not particularly describe and ascertain the nature of his alleged invention, and in what manner the same was to be performed, according to the meaning of the letters patent. Now, that is a question for the jury. It is a question for the jury whether he has given such a description of his invention, and of the manner of carrying it out, as will enable a workman of competent skill in that line of business to act upon it. And this objection to want of clearness is expanded certainly to a very great degree in this notice. It is objected that the specification does not describe the alleged invention truly and sufficiently, but is insufficient and ambiguous and unmeaning in the following respects: in not stating or showing with certainty how or when the brown holland cloth is to be cemented or annexed to the india-rubber—whether after or before the wire teeth have been inserted through the india-rubber; also in that the specification does not describe truly and sufficiently how the brown holland is to be used (that is very much the same thing); also that the claim of invention in the letters patent makes no mention of any use or application of linen cloth. The claim of invention in the patent is an improvement in making cards. It is not necessary that it should be there. The specification must be taken altogether, and you find most distinctly he speaks of using linen cloth. Then again it is objected also "that the specification does

not particularly describe and ascertain the nature of the supposed invention, but merely says so and so, and does not with sufficient particularity or distinctness say what new invention or manufacture is claimed by the plaintiff." If that is a question of law, I must say I think it does most distinctly. I cannot read it without seeing that he says, "I declare the nature of my invention to consist in the application and adaptation of the material known by the name of caoutchouc or india-rubber as a substitute for the fillets or sheets of leather, which are commonly used in the construction of ordinary cards, and thus giving a superior elasticity and durability to such cards." I cannot help thinking that he states very clearly and explicitly what he claims, and as to his not having sufficiently described the mode in which that is to be carried out, that is a question of fact for people of competent understanding in the matter to prove. You have had a great variety of witnesses before you on that subject—on one side certainly—and you will see whether it is the case or not when I come to read the evidence; but I do not remember that any person called for the defendants was asked whether he would have any difficulty in making a card according to the description given of the process in this specification. With respect to that, I think I was called on to express some opinion as to whether the plaintiff claimed as an essential part of his patent the application of linen, but I cannot help thinking there is some little confusion in the use of the term, "what he claims as an essential part of his patent." He claims as distinctly as possible the application of india-rubber as a substitute for leather in making the backs of cards in order to get an elastic bed; that is what he claims, and there is nothing about the cloth in that. But it is not sufficient that a man should claim a principle. He must add to it in his specification a mode of working out that principle practically, and this he now does, for you will find he recommends, as the best mode of working that out, the application of the cloth, but he does not profess to say it cannot be done without. If he had said it cannot be done without, I should have thought he would have said the linen was

essential to the working out of his principle. He says, however, that it is best worked out with that, not that it cannot be done without. If he had said it cannot be done without it, and it could be done without it, he would have taken upon himself to assert a fact which might have misled the public ; therefore he did, I think, wisely in not doing so. He says, "The best mode of doing it that I know of, and that information I am bound to give to the public, is by the application of cloth." He does not take upon himself to say that that is essential. Now, upon that subject I will just point out to you what has been the general rule on the subject of these specifications, to show what information a person must give to the public, because if a man knows a better mode than that which he states to the public, that would be very unfair and wrong, and his patent would be vitiated by it. For instance, in the case of *Turner v. Winter* (1 *ante*, p. 43), it was held a patent is void if the specification is ambiguous, or gives directions which tend to mislead the public ; as, for instance, if it states that by one process three things may be produced, and the process fails as to any one, or if the specification directs the same thing to be produced in several ways, or by several different ingredients, and any of them fail. So if the plaintiff had taken upon himself to recommend here, as a mode in which it might be done, that it might be made with cloth, or that it could not be made without, he might have misled the public. He says it may be made with, and he does not say whether it can or cannot be made without. Then again, in another case it is said, "A patent is void if the specification omit any ingredient, though not necessary for the composition of a thing, for which the patent is claimed, as a more expeditious mode of producing the manufacture." It cannot be said that this specification is open to that objection, for here he has told them the best mode of doing it, and has introduced every ingredient necessary. In another case the specification stated that the cloth might be made of any suitable material, the patentee knowing from experiment at that time that one material and no other would answer ; and the patent was held to be bad, because he had only said,

made without linen. On the contrary, his mode of doing it is with linen. He does not say that it cannot be made without, but his mode of doing it is with. He intimates an opinion that if people choose, after it is made, to take the linen off and fit it by cement on to the cylinder, that may be done. The justice of that opinion is a matter of controversy, as to which you have had evidence called on both sides ; but there is one piece of evidence given on the part of the plaintiff which has not been met by any evidence of the same quality on the part of the defendant. The plaintiff produces a roller, which he says has been used, and they do not show on the other side any experiment made which has failed.

Then we come to the last plea, which is this : "The defendants say that sheet cards and top cards were long before the time of the making and granting of the letters patent, and from thence hitherto have been cards in public use and exercise for the purpose of carding wool, cotton, silk and other substances, within the meaning of the letters patent, and the supposed improvements therein mentioned, and during that time were and have been the cards and instruments principally used for that purpose, and that the supposed invention was and still is unfitted for and useless in respect of sheet cards and top cards." Now the plaintiff has not contented himself with denying one part of that plea, but he has replied to both parts. He puts in issue the whole of it, and says that sheet and top cards were not principally used for carding, and that this invention was fitted and useful for that purpose. Therefore the defendants, in order to succeed upon that issue, must make out, not only that this invention or alleged invention was unfit for sheet cards and top cards, but must make out that they were the cards principally in use. Now, according to the evidence, the cards principally in use beyond all question were fillet cards ; therefore, on that ground they would fail, even supposing that there were any question remaining unsatisfactorily disposed of in your minds respecting the fitness of this article for sheet cards and top cards. I do not see upon the evidence that there is any great differ-

ence in the value of them for the one purpose or for the other. This is not said to be merely cards without cloth backs ; this applies to the whole of the invention—that with the cloth back it is not fitted for sheet cards or top cards.

Those are the various questions which you will have to try—whether the defendants have imitated or counterfeited the whole or any essential part of that which the plaintiff claims. You have to dispose of those two questions in ascertaining whether this is a new invention—1. Whether anything corresponding with it was ever made before ; 2. Whether, if ever made, it was in use and operation publicly, or was a failing experiment, a trial which was abandoned. The third question I have disposed of myself, with the exception of that part which you may take into your consideration—namely, whether the invention was of any public use or not. Because it is said that it is included in that plea, and although I doubt it, I would rather you should consider it as involved in it in order that there may be no failure on my part to leave anything to you which I ought to have left, so as to render useless the investigation we have been so long engaged in. Then the fourth question is whether the plaintiff in his specification gave such a description of his invention as would enable a workman of competent skill to act upon it ; and the fifth is, whether sheet cards and top cards were principally in use, and whether, if they were, this material was fit to make such cards. Those are, as distinctly as I can lay them before you, the questions which you have to try. [The learned judge, after reading over and commenting on the evidence, concluded as follows:] Your attention, as I told you before, will be directed to the particular issues raised, which are, 1. Whether one or both of the articles sold by the defendants were such that, in making or selling them, they did, directly or indirectly, do, make, use or put in practice the said invention of the plaintiff, or any part of the same, or in any wise counterfeit, imitate or resemble the same, or make any addition thereunto or subtraction from it, whereby to pretend themselves to be the inventor or inventors.

Then the next question that you have to determine is whether it was a new invention as to the public use and exercise thereof. That, again, involves the two propositions I mentioned before ; first, whether the article sold before was of such a nature as to embody in it the principle and valuable qualities of Walton's article. If it was not of such a nature, then there is nothing to impeach the plaintiff's claim ; if it was of such a nature, then there follows this question, whether it was a new invention as to the public use and exercise thereof. And in determining that question, I beg you to bear in mind those opinions I have read as having fallen from other judges, rather than state to you any opinion of my own. With respect to the third plea, that the invention was not nor is a new manufacture, as far as that involves the question whether it can be considered as within the statute, that is a question for the court, which I have already determined. As far as it depends upon the question of utility, that is a question for you. Then the fourth is whether the plaintiff in his specification particularly described and ascertained the nature of the invention and the manner in which the same was to be produced. That again is for you, bearing in mind the evidence which has been given as to the power of a competent workman to work from the specification which has been put in. As to the fifth plea, whether these top cards and sheet cards were principally used for the purpose of carding, and whether this invention was unfitted for them, that also is for you ; and I think the defendant ought to make out both parts of that proposition, for both are put in issue. They must make out both that top cards and sheet cards were principally used, and that Mr. Walton's alleged invention was insufficient and inapplicable to those purposes.

Verdict for the plaintiff.

The same patent was sustained in *Walton v. Potter* (*ante*, pp. 162, 318).

Scire facias was subsequently brought, however, to annul the Walton patent, and upon the evidence heretofore adduced in the cases above mentioned, with some additional facts, the patent was declared void for want of novelty. See *Queen v. Walton*, *post*, Trin. V., 1842.

on the issue of not guilty, and the jury were discharged on the other issues.

QUEEN *v.* WALTON.

Queen's Bench, Trin. V., 1842.

(1 Web. P. C. 626, note.)

Novelty. Evidence from a Scientific Journal.

James Walton's patent for improvements in cards for carding wool and other fibrous substances declared void for want of novelty.

Scire facias to annul patent.

The patent of James Walton is described in *Walton v. Potter* (*ante*, p. 162). The evidence adduced of prior user included the patents of Thomas Hancock, produced at the trials of *Walton v. Potter* (*ante*, p. 162) and *Walton v. Bateman* (*ante*, p. 418). In addition the following passage from the *Journal of the Royal Institution*, vol. 21, p. 131, published in 1826, was relied on :

"The members held their first weekly meeting at half-past eight o'clock. In the lecture-room were exhibited a great variety of specimens of caoutchouc or elastic gum in all its states, from the uncoagulated crude sap of the tree to that of perfect purity and aggregation, and also as united to various fabrics, producing a variety of strong, flexible and perfectly water-tight materials, some being of extreme delicacy, and others of great thickness and strength. These were furnished by Mr. Thomas Hancock, who has had peculiar opportunities of manipulating with this substance, and possesses the knowledge of a process by which it can be rendered fluid, and yet retain the power of hardening and assuming its elastic state again. Mr. Farraday explained the nature of caoutchouc, and gave the results of an analysis of the unchanged sap. The various specimens of cotton, silk, linen, leather, felt, woollen, etc., which were upon the table, had been rendered water-tight by the inter-

vention of a layer of caoutchouc between two layers of the fabric, as, for instance, cotton or silk, and the adhesion was so perfect that the substance seemed but as one web. The perfect retention of water by these substances was shown by a calico bag, into which a quart of water had been introduced and the opening closed up ; not a drop or particle of moisture could be perceived on the exterior, though the bag was much handled and pressed.

"When several folds of calico, linen or canvas were cemented together by this substance, a material was produced answering many of the purposes of leather, and surpassing it in value in numerous applications. Its use in the construction of the connecting bands for machinery and card fillets has been tried and approved of.

"In consequence of the manner in which the caoutchouc is applied, no limit occurs as to the form or size, or delicacy or strength, of the water-tight vessels or things which may be made ; it is equally applicable to the cloak and the caravan cover, to the most ornamented flower-vase and the strongest water-bucket."

There was a verdict for the Crown on the issues of novelty.

The Court of Queen's Bench granted a rule *nisi* for a new trial, but the rule was not argued, a compromise having been made whereby all proceedings in Walton *v.* Bateman (above) and in some other actions were stayed.

CRANE *v.* PRICE.

Common Pleas, June 13, 1842.

(1 Web. P. C. 877.)

Meaning of "Manufacture." "True and First Inventor."
Questions of Law and Fact.

The meaning of the word "manufacture" is a question of law—as whether the application of a known mode of working, when applied to a known purpose, is a manufacture.

So also whether the application of this knowledge makes the introducer the first and true inventor.

Any combination in the subject-matter of a patent, if the result be new, or a better or a cheaper article.

An invention, consisting in no more than the use of things already known, and acting with them in a way already known, and producing effects already known, but producing those effects so as to be more economically or beneficially enjoyed by the public, is properly the subject-matter of a patent.

If the invention be new and useful to the public, whether it is the result of long experiments and profound research, or has been reached by some sudden and lucky thought or mere accidental discovery, is not material.

It is no objection to the validity of a patent that the invention cannot be used except by means of a former patented invention, where the second patentee expressly disclaims any part of such former invention.

A patent for an improvement in the manufacture of iron by the application of anthracite or stone coal and culm, combined with the using of the hot-air blast in the smelting and manufacture of iron from iron stone, mine or ore, *held* a new invention.

Crane's patent for an improvement in the manufacture of iron, granted September 28, 1836, sustained.

Special case on judge's notes at the trial.

The action was brought for infringement, and trial had February 12, 1840.

The patent was granted September 28, 1836, numbered 7,195, to George Crane, for "an improvement in the manufacture of iron."

The specification was as follows :

"According to the ordinary practice of obtaining iron from iron stone, mine or ore in this country, the iron stone, mine or ore, either calcined or in the raw state, according to its respective qualities, is put into suitable furnaces with coke produced from bituminous coal, formerly called pit coal, in contradistinction to charcoal produced from wood, which was the fuel employed in this country previous to the introduction of pit coal in the smelting and manufacture of iron. Now, as there are districts in which are to be found large quantities of iron stone, mine or ore in the immediate neighborhood of what is known as stone coal or anthracite coal, it has long been considered as a desirable object to employ such coal for the smelting and manufacture of iron ; and although attempts have been made to

apply such description of coal in the smelting and manufacture of iron, the same have failed, and have been abandoned. In addition to such advantages to be obtained from the using of anthracite or stone coal in the districts where such coal is found, together with iron stone, mine or ore, from the practice I have had I am induced to believe such coal from its properties will be found to produce a quality of iron more nearly resembling iron obtained by the aid of vegetable charcoal. Now, the object of my invention is the application of such anthracite or stone coal combined with a hot-air blast in the smelting or manufacture of iron from iron stone, mine or ore ; and in order to give the best information in my power for enabling a workman to carry out my invention, I will describe the process or means pursued by me, and in doing so I will suppose the furnace of an ordinary construction to be in blast, and that the machinery and apparatus are adapted for the application of hot-air blast, as is well understood and extensively applied in many places where the ordinary fuel (coke of bituminous coal, or the coal in a raw state) is employed in the manufacture of iron from iron stone, mine or ore, and I have found that a furnace having suitable apparatus for heating the blast to about six hundred degrees of Fahrenheit a good arrangement for carrying out my invention, though so high a degree of temperature is not indispensably necessary, but I believe preferable. In charging such a furnace I throw in about three hundredweight of anthracite or stone coal or culm to each five hundred weight of calcined argillaceous iron stone, with a proper quantity of flux, as if working with the coke of bituminous coal ; such charging of the furnace and the general working, with the exception of the using of anthracite or stone coal, is to be pursued as if working with coke of bituminous coal ; and I would remark that the quantities above given are such as I have hitherto employed in making the best qualities of pig iron, *videlicet*, No. 1 or No. 2, at my works, from the anthracite stone coal or culm found in the neighborhood of the Yniscedwyn Iron Works ; but those quantities may be varied according to local circumstances and the refractory nature of the iron

stone, mine or ore, or otherwise, to be reduced, and the quality of iron desired to be obtained, as is the case in ordinary working and at the judgment and discretion of the manager, as heretofore. And I would remark that the anthracite or stone coal or culm may be coked in like manner to bituminous coal before charging the furnace; but from my experience I have not (so far as my practice goes in working with the coal obtained in my neighborhood) found that such coking is necessary, or that a more advantageous result is obtained than in applying the anthracite or stone coal directly from the mine. And it is desirable to observe, I have found it of advantage that the blast of hot air should be as free and unimpeded as possible, and from that account I have hitherto used only anthracite or stone coal the smaller parts of which would not pass through a sieve of an inch mesh, but where the pillar or volume of blast is considerable, say two pounds and upward on the square inch, this precaution is not necessary.

"Having thus described the nature of my invention, and the manner of carrying the same into effect, I would have it understood that I do not claim the using of a hot-air blast separately in the smelting and manufacture of iron as of my invention when uncombined with the application of anthracite or stone coal and culm, nor do I claim the application of anthracite or stone coal in the manufacture or smelting of iron when uncombined with the using of hot-air blast.

"But what I do claim as my invention is the application of anthracite or stone coal and culm combined with the using of hot-air blast in the smelting and manufacture of iron from iron stone, mine or ore, as above described."

The declaration assigned as breaches that the defendants did smelt, manufacture and make iron on the improved plan and in imitation of the invention of the plaintiff, and did vend iron so smelted, manufactured and made. That defendants did use and put in practice the said invention by smelting, manufacturing and making iron in imitation of the invention. That defendants did counterfeit, imitate and resemble the invention, and did make colorable additions thereto and subtractions therefrom. That defendants

smelting or manufacture of iron was not the invention of the plaintiff, but was well known and in use before the grant of the letters patent to the plaintiff, as admitted in the specification thereof ; and the alleged invention of the plaintiff is only the use of the hot-air blast with the well-known anthracite stone coal or culm ; and that the hot-air blast was used in the smelting and manufacture of iron prior to the letters patent, at the works of the plaintiff, called the Yniscedwin Iron Works, at the, etc. (specifying a great number of other works and places), and also at a great many iron works in the kingdom, too numerous to be individually specified. 4. That the alleged invention of the plaintiff necessarily involves the use of another invention, which was patented before the date of the plaintiff's letters patent—namely, the hot-air blast of Neilson ; and that the application thereof to anthracite or stone coal, which was a well-known fuel, was an application all persons were and are at liberty to make who had permission to use the invention of Neilson. 5. That the exclusive use of the hot-air blast having been previously granted to Neilson by letters patent, the subsequent patent granted to the plaintiff for the same invention is void. 6. The anthracite or stone coal or culm having been well known and in use as a fuel prior to the plaintiff's patent, the application of such fuel to the smelting or manufacture of iron by well-known methods is not a new manufacture within the meaning of the statute. 7. That the use of the hot-air blast, described in the specification, produces substantially only the same effect when the anthracite or stone coal or culm is used as fuel in the smelting and manufacture of iron, as when any other kind of coal or coke is used for the same purposes. 8. That the specification is defective, inasmuch as it does not describe the kind of furnace to which the alleged invention is applicable, and it is not applicable to all kinds of furnaces. 9. That the specification does not clearly state whether or not it is intended to apply to the use of anthracite or stone coal and culm as the only fuel, or whether it is intended to include the use of anthracite or stone coal and culm together with other fuel.

great abundance, and as the process of Lord Dudley came to be better understood, and when the vast power of the steam-engine was applied to increase the blast that worked the furnaces, greater results followed. For many years the iron was not so good as the Swedish iron, made, from the abundance of wood in that country, chiefly or altogether from charcoal.

It was discovered that the manufacture could be considerably improved in various ways. The practice of coking the coal was suggested ; that was a great improvement. Some other improvements were introduced, by which it was supposed that, for many purposes, we had at length an iron which was equal to Swedish iron. However, some years ago it was ascertained that there were large fields in South Wales which produce stone coal or anthracite. It does not break up easily, and for many purposes of combustion was useless. This coal has been known to exist for centuries ; it was known to be of no use for domestic purposes ; it had never been applied to any of the great processes of smelting. It had been the subject of much consideration, of various attempts, and some patents ; it had been the subject of even prizes ; rewards were offered for the purpose, to any person who could make use of it or bring it to bear advantageously in the manufacture of iron. But until the time of Mr. Crane's discovery, nothing had been done successfully ; but Mr. Crane having distinctly ascertained the fact, took out his patent, enrolled his specification, and published to the world what he had done.

There has very rarely been a discovery of this importance and magnitude. Within a very short time the value of all the property around Mr. Crane's premises, and around all the other smelting works that under his license had begun to work, was greatly advanced in value. The iron itself was discovered to be much more abundant in quantity ; the same weight of ore gave what they call a larger yield of metal, and the metal that was obtained was itself of a much more valuable quality. The process itself was one of considerable economy compared with the other, for a smaller quantity of fuel was used. The effect of this discovery is

that we shall be able, not merely to compete on the subject of iron of the best sort with any country on the face of the globe, but that we can now by this process manufacture a much better iron than any that we have been in the habit of importing, for any purpose, from any part of the world. I speak chiefly, of course, of Swedish iron, which has long been considered for certain purposes the best iron ; and even at the present time Swedish iron, no doubt, is used for some purposes, although to a much less extent than was the case a few years ago.

Mr. Crane then has brought into most efficient use large tracts of this description of coal which before his invention undoubtedly was considered to be of little or no use, beyond furnishing fuel to some few manufactoryes. The supply to the London market was very small, indeed so small that the price of this coal was higher than the ordinary coal ; not that the coal itself was dearer, for it was a mere drug ; it was to be had at a lower price than any other coal at the place where it was to be obtained ; but the demand for it was so small and the quantity which came so inconsiderable that they could not afford to bring it. It was not an article in sufficient demand to come with such facility as to be furnished at the cheap rate at which it would have been if there had been the same demand as there is for bituminous coal. This invention and this discovery has created a source of wealth, wherever stone coal exists, that had no existence whatever before. Probably the price of that article, the value of it, is more than quadrupled, for instead of being an article of no value, it has become now of a value as great as bituminous coal itself, and for the purposes of this manufacture its tendency is entirely to supersede it ; wherever it can be obtained, it would supersede it.

But this is not the only important matter ; it gives a larger quantity of iron. The iron itself is of far greater value ; and if it be required that a discovery should give to the world a new manufacture or substance, the iron that is produced by Mr. Crane's invention undoubtedly has this remarkable feature of novelty—that it is far stronger and

anthracite before.] [Wilde, *Solicitor-General*. It will terminate beyond all doubt in a question of law. There are some facts which are material—when the plaintiff invented it, when he obtained his patent, and some other things.] The true question raised by the issue on this plea I apprehend to be whether it is impossible for any one to use a hot-air blast of any sort without infringing Neilson's patent, because, if there be a single mode—if there be any possible hot-air blast of any sort which is not Neilson's, then the issue raised on these pleadings must be found for the plaintiff. Be it admitted that Neilson discovered one mode of using a hot-air blast for any purpose whatever, not applying it at all events to the making of iron with stone coal, the plaintiff gives to the world as his discovery a hot-air blast of a temperature of 600 degrees Fahrenheit—that is, about the temperature at which lead will melt. I shall show that there did exist before Neilson's patent a mode described of a hot-air blast for a furnace. (See Neilson v. Thompson, *ante*, p. 136.) If any one existed, all that the plaintiff was called upon to say was this—I care not where or how you get the hot-air blast; whether by license under Neilson or by means before given to the public of some other improved method. The hot-air blast is well known; I claim nothing in respect of it, except the using it in combination with anthracite, and not even that as against any patent. If it be necessary that I should have a license to use a particular kind of hot-air blast, I admit that I must get that license. If Neilson had a complete monopoly of all the hot-air blasts in the world, the patent, as an improvement on another patent, is unquestionably good. The plaintiff has discovered that the hot-air blast used in a particular manner, for a particular purpose, will produce a result incomparably better than has been done by the combination of any other matter to produce the same results; if a particular form of hot-air blast cannot be used without a license, that license must be obtained.

But it will be said the plaintiff took a license from Neilson. The plaintiff's invention was of infinite importance; none in modern times to compare with it in the benefits it

had all stone coal ; I saw it at the top ; I could not see it at the bottom ; I was not there when the furnace was charged. The plaintiff gets stone coal close by his works. They were not using free-burning coal at the Neath Abbey Works ; it was coke. I was last there on June 7, 1838. I have seen free-burning and bituminous coal coked when mixed. I have never seen small free-burning coal coked. I am coker to the plaintiff. I have tried several times to coke small free-burning coal, but could not succeed. Anthracite will not coke.' I was last at the Neath Abbey Works on June 7, 1838.

The coal called free-burning coal was said by the counsel for the defendants to be very nearly stone coal, but not to fall properly under that name ; this, however, was denied on the part of the plaintiff. Mr. Mushet informs me that free-burning is the very opposite to anthracite, and of two kinds—the one of a reedy and laminated, the other of a crystallized structure. That in burning it exhibits no appearance of bituminous or binding matter, but contains pure carburetted hydrogen with a carbonaceous residuum ; that the resulting coke is open, and not at all bound together by a bituminous cement.

On re-examination. On June 7 they were using 5 cwt. and 1 qr. of stone coal, and coke of bituminous coal, as in the month of May.

John Buckland. I am master moulder to the plaintiff. I have been on the works thirty-six years. The works are situated on the anthracite or stone-coal formation, which extends to Pembrokeshire, between sixty and seventy miles. I have known of several attempts to smelt iron with stone coal ; they all failed. In 1827 we used a small quantity of stone coal, but it was drawn off ; that is, no more was put in ; we ceased using it. The effect was that in a short time the twires were shut up, the blast could not get in ; it was all clogged. I remember many other experiments in the neighborhood, here and there ; they all failed ; we never saw one succeed or heard of one succeeding. I know the plaintiff's furnace, No. 2 ; it was set to work about February, 1837. A hot-blast apparatus was put up. The fur-

from Mr. Neilson ; he began with No. 2 furnace. It is one of the smallest size furnaces. It was set to work before McKenzie left. A short time after it was set to work it was blown out. The two other furnaces, No. 1 and No. 3, are larger than this one. There was stone coal in all of them about three months after McKenzie left. We have used stone coal in No. 3 for two years, not alone, but with other coal. I know the iron is stronger by the using it. We cast with it, and knew whether it would hold pressure or not. I do not myself take any account of the yield.

On re-examination. The men are paid by the ton of iron made. There is more iron made in No. 2 and No. 3. I never knew the stone coal used at all with the hot blast before plaintiff's patent. The moulder casts his own moulds. I am caster, and turn out the castings. That enables me to judge of the quality. The strongest iron I have ever seen is the stone-coal iron. I never saw iron run better.

Reece Davis. I have been furnace manager to plaintiff for three years. The hot-blast apparatus was erected before I got there. I went there the last day of January, 1837. The plaintiff succeeded in making iron from stone coal. The temperature of the blast is kept as near as we can to melting lead. There was coke in No. 2 when I was first there ; we began soon after to put stone coal in. About February 7 or 8 we got all stone coal on. That continued for two years and three months. The iron is stronger, and the quantity from the small furnace greater ; we get from 30 to 32 tons a week on the average, and before we only got 22 or 23 tons. We burn less coal ; from 30 to 32 cwt. of stone coal makes a ton of iron. [TINDAL, C. J. All this examination goes to the usefulness—there is no issue on that. They do not say it is not useful ; they only say other people knew it before.] [Pollock. In a question of prior use or not, the extent of the utility must frequently be a very important ingredient, because if it had been used by anybody else, the extraordinary difference would instantly have struck the person so using it. It is utterly impossible that it would not have got into general knowl-

edge and use.] The bituminous coal is the dearest in that part of the country, I think by a shilling or two a ton. No. 3 was begun to work about two years ago. No. 2 was the first which began with stone coal. The furnace was blown in with coke and cold blast, and as soon as the apparatus was ready we put stone coal in ; the hot blast was then used. The iron is strongest when all stone coal is used. I was at the Neath Abbey Works twice in April or May, 1837. I saw the defendant, Joseph Price. I told him the plaintiff had sent me up to see how the furnaces were. I told him how we got on at Yniscedwin, and for them to go on in the same way ; the furnaces would become in better order. He asked me some questions about our furnaces—what we did there. There was stone coal in use at that time at the Neath Abbey Works, and hot blast. He told me to thank my master for sending me up there ; he said, "We are all old hands here, we shall find it out ; we shall find out the best way of doing it." He said that at that time their furnaces were not making so much iron, not doing so much ; but he said they were old enough, they would find it out if they had a little time. I was speaking to Mr. Hosgood, and I told him the best way we found of going on, and I had been on the top of the furnace and round the yard with him. I was in the service of the British Iron Company, at Abercrae, in 1826 and 1827, and for a long time before. They used the cold blast ; I never saw the hot blast at all. Mr. Harper before that tried stone coal. He built a small furnace to try an experiment. The first furnace was three feet on the boshes, and fifteen feet high. He had been trying in that furnace, and he pulled the inside down and made it a foot larger, and built it nineteen or twenty feet high and four feet on the boshes. He succeeded in the smaller one, and that made him build the larger one. The larger one did not succeed. In the smaller one he first used coke, and then it came to stone coal. They tried the first time all coke, and mixed some stone coal with it, and it failed three or four times—I do not know how many times ; and at last they had all stone coal. It succeeded in the smaller, but they only did that to try an ex-

periment. After the larger furnace had been worked about a month, Mr. Harper sold the works to the British Iron Company. They kept it at work ten or twelve months. They sometimes blew the furnace with all coke ; Mr. Northall then put some stone coal in. After the British Iron Company had it, the blast was never stone coal ; not all stone coal. The twires were sometimes shut up, and we cut them out ; that happens in every furnace.

David Mushet. I have been acquainted with the iron districts forty years. In 1826 I was managing director of the British Iron Company. I visited the works of the British Iron Company, at Abercraive, twice in 1826. They were endeavoring to use as large a quantity of stone coal as could be done with propriety. At one time they were using three eighths of stone coal to five eighths of bituminous coal, and at another time nearly equal quantities ; various proportions had been endeavored to be used before that. The iron was forge iron ; inferior for casting purposes ; the quantity was moderate ; during the first four months of the blast they made 12 tons, and during the last four from 22 to 24 tons per week. I should consider, in these days, that to be a very small quantity. I thought the iron wretched. The average yield of furnaces in South Wales is nearly 50 tons a week. In my judgment, it did not pay for making ; during the last four months, it came to £6 per ton, and during the previous four to £8 per ton. The company never realized £4 per ton by it. I sold one boat-load to the Neath Abbey Company, and Mr. Price (one of the defendants), on being pressed to take more, said it was so bad they could not use it. The iron was sent to Staffordshire. The works were, by my advice and direction, abandoned. The company were under a sleeping rent of £400 a year. With more powerful machinery, a larger quantity of iron would have been made, and so far as that went this would have reduced the common charges on the cost of production, but it would not have altered the quality of the iron. The anthracite is of an untractable nature. I have heard that many attempts have been made during the last thirty years to make iron with stone coal. It was a

one ton or two that was middling, there were ten tons which were bad.

A number of other witnesses were called who testified to the same effect.

William Carpmael. Nearly seventy patents connected with the manufacture of iron have from time to time been granted. The first making any mention of the use of anthracite is Martin's. The mode proposed is ingenious, but it would fail as soon as the blast comes upon it. He speaks of the blast ; the ordinary blast of that period was the cold blast ; the cold blast blows anthracite black instead of aiding the combustion. The object of Philip Taylor's patent was to use carburetted hydrogen gas, for the purpose of supplying to anthracite that in which it appeared to differ from other coal ; it failed. A blast of air was to be used ; the ordinary blast at that time was the cold blast. Botfield's invention is to use, with or without the ordinary blowing apparatus, heated air. (See Neilson *v.* Thompson, *ante*, p. 136.) It is not applied to stone coal. His invention cannot be used without blowing hot air into the furnace, if the ordinary blowing apparatus be used in conjunction with the other apparatus. I never heard of stone coal combined with the hot-air blast until Mr. Crane's discovery. So far as my knowledge goes, any attempt, both in America and England, to use any real quantity of anthracite in the making of iron has failed, any portion of it added in the working of the furnace requiring an increased quantity of coke in order to make iron at all.

George Cottam. I have been acquainted with the making of iron for thirty years. That which is set forth in the plaintiff's specification is new. I always make experiments on any new iron. I cast a bar or two of the plaintiff's iron, and found it very strong. According to my general experience, a bar of ordinary iron, an inch square and four feet long, supported at both ends and loaded in the middle, will break with from 440 to 445 lbs. A similar bar of the plaintiff's carried a weight of one third more before it took a permanent set ; it broke with 599 lbs. I made some very thin castings, less than a quarter of an inch, with it. I

never met with anything so tough and strong, except some Swedish pigs made with charcoal. I had some very tender Scotch hot blast, which broke at 403. I mixed some with plaintiff's iron, and it immediately raised it to 500 lbs. ; I think 518 lbs. was the breaking weight, and we used it all up for that purpose, but it was too dear to go on with. The iron is an exceedingly good iron, and much better than the other iron where strength or where hardness is required ; it is tough and hard, which is an advantage. I have tried a great many experiments with stone coal. I tried it under my engine, and by putting a blast to it I found that I could not get a heat ; I had a black instead of a red surface.

Wilde, Solicitor-General, for the defendants. The plaintiff has no merit in bringing the hot blast before the public ; he heard of it in common with the rest of the world. The use of stone coal in the manufacture of iron was an idea which the plaintiff had no pretence to the merit of having originated ; its use, and the advantages to be derived therefrom for smelting iron, and a variety of other purposes, were known. The hot blast, when brought before the public, was not to be limited in its application to any particular purpose ; and Mr. Neilson had a right to apply it to any of the purposes to which it could be made applicable. What is there in Neilson's patent to prevent his applying the hot blast to stone coal ?

The dates are material. Did the plaintiff spend one six-pence or make any experiments before the date of his patent ? His patent is dated in September, 1836, and then he sends for Neilson's man, and the apparatus is not put to work until the December or January following. Neilson's patent is perfectly general, and the mode in which the hot blast is to be applied to every kind of furnace, burning any kind of fuel, is described. The plaintiff has done nothing but apply Neilson's patent to known articles, by known means, to effect a known object. Stone coal has been applied to the manufacture of iron ; attention was drawn to it ; there was no distinction whatever between the mode of manufacturing iron with that sort of coal and with any other sort of coal.

naces. The plaintiff has claimed the use of anthracite coal, and in the same manner any other person might claim the use of any other coal or particular species of fuel.

Further, the so-called invention is not a new manufacture within the meaning of the statute. The stone coal was well known as a fuel for furnaces, the hot blast was well known for the manufacture of iron, the using them together in a known manner is not a new manufacture. In the case of *Brunton v. Hawkes* (1 *ante*, p. 327) it appeared that the method described of uniting the two parts of the anchor was the same as that by which the different parts of the common hammer and the pick-axe were united together, and Bayley, J., said, "A patent for a machine, each part of which was in use before, but in which the combination of the different parts is new, and a new result produced, is good, because there is novelty in the combination; but here the case is perfectly different. Formerly three pieces were united together; the plaintiff only unites two; and if the union of those had been effected in a mode unknown before, as applied in any degree to similar purposes, I should have thought it a good ground for a patent; but unfortunately the mode was well known and long practised. I think that a man cannot be entitled to a patent for uniting two things instead of three, where that union is effected in a mode well known and long practised for similar purposes."

In the present case it is quite clear the anthracite and the hot blast were put together in a way well known for purposes well known before for the manufacture of iron. Every one knew that hot blast could be used for that purpose, and stone coal was and had been used, though not so advantageously. There cannot be a patent for using a thing for the same purpose, in a way which everybody knows. In the case of *Cornish v. Keene* (1 *ante*, p. 139) it was said that that was not the subject-matter of a patent, or a new manufacture, or an improvement of an old manufacture, which was merely the application of a known material in a known manner to a purpose known before, but the court thought the invention a new manufacture, and

that the latter part of the description did not apply. In the case of *Kay v. Marshall* (2 *ante*, p. 416), it appeared that flax had been spun at various distances, and that this was a fundamental principle of dry spinning; that the machine was made with varying reaches to suit the length of the staple, and that cotton had been constantly spun at a distance of from two to six and a half inches. The court were of opinion that the spinning flax, at a given distance, as two and a half inches, or such other degree of shortness as would suit the continuity of the roving, was not a new manufacture. In the present case everything is the same; the furnace is the same; coal of every shade, from the bituminous to the anthracite, had been used before; the effect of Mr. Neilson's patent is well known. Can a person have a patent for applying that which everybody knows is applicable to fuel, to one species? In Kay's case, every one knew that flax could be spun at various distances, and that the machines could be adapted to any distance; so every one knew that the blast could be applied to any furnace.

In *Minter v. Mower* (2 *ante*, p. 178) a patent was bad because the specification included that which had been invented before, on the ground that it would have prevented the prior inventor from using his invention; so this includes that which had been used before, and would have prevented Neilson from applying his hot blast to furnaces and to a fuel, the use of which in such furnaces was well known (*Saunders v. Aston*, 1 *ante*, p. 466). These cases clearly show that the use of that which is well known, for purposes that are well known and in a manner well known, is not the subject of a patent.

As to the fourth issue, the specification is defective in not stating the kind of furnace, since it is doubtful whether anthracite can be used beneficially in large furnaces; the objection is, therefore, that the specification should have described the difference between a small and a large furnace, or, at all events, have described the kind of furnace with greater particularity.

The issue on the fifth plea is whether the hot-air blast

described by the plaintiff is the same as Neilson's, and the using of the same a using of Neilson's invention ; and in the event of this issue being found in favor of the defendants, leave has been given to move to enter a verdict for the plaintiff. It has been said that if there be any hot-air blast but Neilson's, the plaintiff is entitled to a verdict ; but if Neilson's be a hot-air blast in use in England, the defendants are entitled to the verdict ; because, if there are some hot-air blasts which the plaintiff may and some which he may not use, this should have been stated in the specification. If the plaintiff claims to use the combination of every hot-air blast, then Neilson's is included. No other hot-air blast than Neilson's is suggested, and the plaintiff worked under a license from him. It is said that the plaintiff would be entitled to judgment *non obstante veredicto*, notwithstanding the proviso in the patent against interfering with any previous patent. The object of the patent is that the person obtaining it shall use the specific thing, and nobody else ; if that which is granted includes a patent granted before, two would be entitled to an exclusive use of the same thing. If the Crown has the right to grant this second patent, it grants the sole using to two in succession, and the two grants cannot be good, since the Crown grants to Mr. Neilson the sole using of the hot-air blast, and to the plaintiff the right of using it for a particular purpose. The Crown says, I grant this patent, provided it does not interfere with any other ; it does not say, provided you obtain a license ; this second grant is void, and the plaintiff cannot be entitled to judgment *non obstante veredicto*. The letters patent restrain every one from using the invention without the license of the patentee ; that is a protection and a privilege granted to the patentee ; but the clause now alluded to is for the patentee expressly, and has no reference to the public.

Pollock, Attorney-General, Richards, Smith and Webster, for the plaintiff.

The question of infringement is not now open to the defendants ; that is not a question of law, but one of fact, which was conceded at the trial, or the opinion of the jury

would have been taken upon it. It appears from Morgan's evidence that the defendants were using a considerable proportion of stone coal, and for anything that appears to the contrary, when Reece Davis was at their works, in April or May, 1837, they were using all stone coal and hot blast; it further appears that the defendants' colliery, purchased since the plaintiff's patent, is stone coal, and that the hot blast in use at the defendants' works was of a temperature to melt lead, which is known to take place about 600 degrees Fahrenheit. The plaintiff's invention is the beneficial use of anthracite. A partial use of anthracite is equally an infringement of the patent, which is for making iron by the combination of hot blast and anthracite. The evidence being that the best iron is that made with all anthracite, the patent is not to be evaded by a party using a part of the invention, and being contented with a part of the advantage.

Under the second issue, whether the plaintiff was the true and first inventor, it must be assumed that some invention has been made; the only question then is whether the plaintiff was the person who first published this invention to the world. Now, it has not even been suggested that any person before the plaintiff made and published to the world the beneficial use of anthracite, in combination with the hot blast, in the manufacture of iron. The various patents put in, independent of the other evidence, show how many other persons had made attempts and experiments, but it is not suggested that the plaintiff learned his invention from these or any other sources; on the contrary, the plaintiff is recognized and hailed by a large body of his neighbours deeply interested in the prosperity of South Wales, as the discoverer of something which was a great benefit to the country and to all connected with the anthracite district. And this was fully borne out by the evidence as to the sudden increase in the value of that species of property. The observation also of the defendant, Joseph Price, that they were all old hands, and would soon find it out, is an admission that the plaintiff was the inventor of something for the discovery of which the expenditure of time and thought was necessary.

But it is contended under the third issue that this something which the plaintiff has discovered is not a new manufacture within the statute of James. This involves two questions : 1. Whether the said invention is a manufacture ; 2. If a manufacture, whether it be new. On the latter of these two questions a doubt can hardly be entertained. It appears from the evidence, and in fact it is admitted on the other side, that a great variety of attempts had been made to smelt iron with anthracite or stone coal, but that they had all failed and been abandoned. It is for the defendants to make out that the invention or manufacture was used before. The plaintiff has shown certain general facts, from which the conviction of the novelty of the invention or manufacture almost irresistibly arises, as, for instance, the extent of the anthracite-coal basin ; the great desideratum of a method of using it ; that at the time of the plaintiff's patent there was not a single furnace smelting iron from anthracite. Hence, for the purpose of the manufacture of iron, the discovery of the beneficial use of anthracite was the discovery of a new fuel or ingredient in the smelting furnace. The defendants say it was used before ; but when, where and to what extent ? Was it in use at all at the time of the plaintiff's invention ? Had it even been used in combination with the hot blast ? There is no evidence whatever of its having been so used. The patents which have been put in, and which have been relied on in the argument on the other side, furnish the strongest evidence in support of the plaintiff's case, showing, as they do distinctly, the nature of the attempts which had been made. But it is said that iron was actually made in 1827, at Abercraive, with anthracite. What are the facts ? That in a model furnace, three feet across the boshes—that is, in the widest part—and fifteen feet high (an ordinary furnace being fifteen feet across the boshes and forty-five feet high), they succeeded in making iron with anthracite and cold blast. They then set to work with a larger furnace, but the yield of iron was small, the quality so indifferent—tender and cold short—that it could hardly be got rid of, even at a loss of from £2 to £4 a ton. After struggling on for about a twelvemonth the works

were abandoned, although the company were under a sleeping rent of £400 per annum. Contrast this with the state of things immediately after the publication of the plaintiff's invention. A sudden advance takes place in the value of all anthracite property ; the iron is pronounced to be the best iron made ; the plaintiff is hailed as a great discoverer ; and, on the argument, the great value of the invention has been fully admitted.

But it is said that the invention is not a manufacture for which a patent can be granted, that it is simply the use of anthracite, a known fuel, in a way well known before. Nothing is more fallacious than this mode of speaking of an invention—that it is only so and so. Discoveries which have reflected the greatest honor and benefit on mankind have been but the application of some well-known substance or some well-known laws and properties of matter, obvious and simple in the extreme when found out. The invention may be considered in any of the following ways—as the introduction of a new fuel in the smelting of iron ; as a new mode of making iron ; or as a mode of making a new iron, *i.e.*, as a new article, a new combination of matter. Had anthracite been recently discovered as a fuel, can it be doubted for an instant that its application to the manufacture of iron would have been the subject-matter of letters patent ? Wherein consists the difference between that and the present case ? It was known and used as a fuel for some purposes, but practically useless for the manufacture of iron. The plaintiff has published to the world in what manner it may be rendered useful. There are many cases in which the application of a well-known article, in a manner well known before, in the manufacture of an article well known before, has been held to be the subject-matter of a patent. In Derosne's case (*2 ante*, p. 78) the invention was the application of charcoal as the filtering medium for syrups of sugar. Charcoal was well known, and had been used as a filtering medium for almost every liquid, but before the patent had not been applied to the manufacture of sugar. In Hall's patent (*1 ante*, p. 363) the invention was the application of the flame of gas to singe off the

superfluous fibres of lace, and other similar fabrics having holes and interstices. In Dudley's patent, excepted in the Statute of Monopolies, the invention was the use of pit coal instead of wood in the manufacture of iron. In all these cases the result attained was old, but the novelty or invention consisted in the manner of attaining the result; the novelty of a manufacture may consist either in a new mode of attaining an old result or in a new result attained by old modes. Suppose the iron in the present case to be old—that is, to be substantially the same material as was obtained before. Then the novelty consists either in the process of making, or in its being composed of certain materials. Suppose the invention a mere process, then any change in the order of the process, or even generally in the *modus operandi*, constitutes a new manufacture. The inventor may fail in the specification of the invention, and in all the cases cited in the argument for the defendants, with the exception of Brunton's case, the defect has been of this nature. In *Saunders v. Aston* (1 *ante*, p. 466) the real invention was an improved button, in which the old flexible shank was substituted for the old metal shank by the special aid of a collet, but this was not so claimed or pointed out by the specification as the invention. In Kay's case there was the same kind of defect. The immediate result of Kay's invention was to put flax-spinning on the same footing as cotton-spinning, and to increase the manufacture of that article many thousandfold. No one who is aware of what Kay did for that department of our manufactures can doubt for an instant that an invention existed, in fact, which if properly specified was the subject of a valid patent. But the court on the construction of the specification separated the invention into two distinct parts, in respect of either of which, taken independently, the patent could not be supported (*Kay v. Marshall*, 2 *ante*, p. 416). The position of the plaintiff resembles that of Mr. Kay in respect of the extraordinary nature of the result produced. The large coal basin of South Wales, before comparatively valueless, has now become most valuable property. In the case of *Brunton v. Hawkes* (1 *ante*,

p. 327) the objection was that the anchor was not new, the adze or mushroom anchor, having the parts united in the manner described in the specification, being in use before the patent; so that a part of the invention specified and claimed in that case was old. Further, the observations in that case respecting the amount of the invention, or its sufficiency to support letters patent, cannot be relied on, and reasoning of that kind, as has been already remarked, is extremely fallacious. What evidence can the result furnish of the labor and painful thought which may have been expended? The perfection of invention is simplicity of means to the end; and the progress of any particular invention is always marked by the adoption of simpler and cheaper methods. It has been expressly held to be no objection to a patent that the invention was the result of accident; many of the greatest discoveries have originated from that source. What test or measure can exist of the amount or magnitude of the invention? The only practical test is its benefit and utility. What merit in respect of the invention is due to the introducer of a manufacture from abroad? But the rights of such patentees are recognized by law. It is for the benefit to the country and the public that the patentee is rewarded. The magnitude and nature of the consequences produced afford the best evidence and a certain measure of the sufficiency of an invention to be the subject of letters patent. In the present instance there is abundant evidence of design, labor and expense. It has been urged that the plaintiff has done no more than any one might have done—namely, get a license from Neilson and use the hot blast to his furnace charged with stone coal. But how came it to pass that no other person did that during eight years? Was it so obvious, after the repeated attempts to make iron with and the abandonment of this untractable fuel, that it could be used beneficially for this purpose? Did it require no experiment to determine that a temperature of about 600 degrees Fahrenheit was the proper temperature, or to ascertain what would be the probable effect of the hot blast on the anthracite, or on the quality of the iron and yield of the furnace, it being an

could be made from rubbish, hitherto rejected as useless, by dealing with that rubbish in a particular manner, this would be a perfectly good subject-matter of a patent. This was decided by Lord Eldon when he said there may be a valid patent for a new combination of materials previously in use for the same purpose, or for a new method of applying such materials (*Hill v. Thompson*, 1 *ante*, pp. 285, 299), in which case also part of the invention was making iron from slags or cinders. The combination of the hot blast and anthracite is new and the result produced is a new iron—an iron of better quality than any before produced, and with less consumption of fuel. What other test can be adopted? The substances were never employed together before, and the result obtained is for the purpose of use and commerce a better and a cheaper article; it resembles more nearly than any other the iron from vegetable charcoal. The uniform tenor of the decision shows any modification in the manner of making an article of commerce, whereby the price is diminished or the quality and general utility of the article produced are increased, to be a new manufacture, even though all the substances were known and used (*Huddart v. Grimshaw*, 1 *ante*, p. 128; *Boulton v. Bull*, 1 *ante*, pp. 59, 97). It has been objected that the plaintiff continued his experiments after the grant of the letters patent; but this he is bound to do, and to give the public the best means with which he is acquainted up to the time of making his specification. This question was decided in *Crossley v. Beverley* (1 *ante*, pp. 425, 437), and the authority of that case has been confirmed by many subsequent decisions.

On the fourth issue, the sufficiency of the specification to enable any person acquainted with the manufacture of iron to practise the invention, no question has now been made. It is clear on the evidence that anthracite, in combination with the hot blast, may be used beneficially in all furnaces; but it is a question yet undecided what size of furnace is the very best for the manufacture of iron according to the plaintiff's invention. Further, every specification must be examined according to the state of knowledge at the time.

that a company abandoned their works though under a sleeping rent of £400 per annum, could be rendered useful for smelting iron? Neilson's patent was in existence for eight years before the plaintiff's patent. Suppose the patent had expired and a considerable interval, say fifty years, had elapsed before any person had been at the pains and expense to try once more that intractable fuel, and to see whether, by a proper hot blast and a proper adaptation of other things, it could be used in smelting iron. Can it be doubted that under such circumstances the patent would have been valid? Is the invention, then, less the subject of a patent because the hot blast itself has only been discovered for some eight years instead of having been known for a longer period, or always known? But it is said that Neilson is prejudiced. In point of fact he has been greatly benefited, since by reason of this discovery a license under his patent has been taken not only by the plaintiff, but by many others.

The proviso can only mean that a subsequent patentee shall not use the prior invention without a license from the prior patentee. If this be not the meaning, the greatest mischief instead of benefit would result, since the progress of improvement would be stopped during the term of the prior patent. If letters patent for an invention involving the use of an invention the subject of an existing patent, or for an improvement on an existing patent, be void in law, the author of such invention or improvement must wait until the expiration of the prior patent before procuring letters patent for his own invention and publishing it to the world, whereby he will run great risk of losing all reward, the prior patentee will be deprived of the advantage resulting from the extended use of his own invention during the residue of the term of his letters patent, and the public will run the risk of losing the invention altogether by the death of the party, or at all events will be deprived of the enjoyment of it for the time during which the invention is, so to speak, in abeyance (*Morgan v. Seaward*, 2 *ante*, p. 419). Many instances might be cited in which prior patents have been rendered many times more valuable than before by

reason of some subsequent improvement or addition, which was the subject of other letters patent. A patent for an improvement generally is valid (*Morris v. Bramsom*, 1 *ante*, p. 21). What difference can it make whether the thing improved upon be or be not itself the subject of a patent? But this question has been expressly decided by Lord Eldon, who, on opposition at the great seal, allowed letters patent for an improvement on an existing patent (*Fox, ex parte*, 1 *ante*, p. 185). Further, this objection has never been raised in the course of litigation on any patent, notwithstanding that in a great number of cases the patent in dispute was for an improvement on an existing patent; and such an objection, if allowed, would be prejudicial to the prior patentee, the improver and the public.

Bompas, in reply. The question of infringement is open to the defendants, for the court were to be at liberty to draw the same inference as a jury. If the defendants used a substantial part for the purpose of evading the patent, that would undoubtedly be an infringement; but if the patent be for using all stone coal, then there has been no infringement. The present case differs essentially from any that has been cited, as to the using of known substances in known manners. Here everything is old—the materials, the manner of using, the result; there is no novelty, everything takes place according to the ordinary method. The plaintiff has done nothing more than adopt Neilson's patent; he uses that which was known before, in a manner known before, and for a purpose known before. No case has gone so far as to decide that such can be the subject of letters patent.

The fifth issue is one partly of fact and partly of law. The plaintiff cannot have judgment *non obstante veredicto*. The specification must be considered as included in the letters patent; the grant would there appear to be the using hot blast to anthracite. Now, Neilson has a prior grant for using hot blast to all kinds of fuel; anthracite was a known fuel; how, then, can the plaintiff's patent be good for using hot blast to a particular purpose? Such a grant in effect gives the right of using the patent of another, but such a

grant is clearly void in law ; there cannot be two grants of the same thing to different persons. Although patents have been taken out in many instances for improvements on patents, a grant of using a patent for a particular purpose is not good. Without a patent the plaintiff could not have used the hot blast ; the using it with a patent is as much an infringement as the using of it without a patent. The proviso means that the grant shall not interfere with any previous grant. No case has been cited in which the subsequent patent included the use of the former patent ; for such second grant would of necessity be void.

TINDAL, C. J. [ERSKINE, COLTMAN and MAULE, JJ., also sat]. This was an action on the case for the infringement of a patent, granted to the plaintiff September 28, 1836, for an improvement in the manufacture of iron. The declaration was in the usual form, and the defendants pleaded thereto : 1. That they were not guilty ; 2. That the plaintiff was not the first and true inventor of the said improvement—upon each of which pleas issue was joined ; 3. After setting out at length the plaintiff's specification, the defendants pleaded that the alleged improvement therein described was not a new manufacture, invented by the plaintiff, within the intent and meaning of the statute, as to the public use and exercise thereof in England, which allegation was traversed by the plaintiff in his replication ; 4. The defendants pleaded that the nature of the plaintiff's invention, and the manner in which it was to be performed, was not particularly described or ascertained by the plaintiff in his specification, upon which plea issue was joined. And in their last plea the defendants, after referring to the plaintiff's specification, before set out in the third plea, stated the grant of letters patent, dated September 11, 1828, to one James Beaumont Neilson, for an improved application of air to produce heat in fires, forges and furnaces, where bellows and other blowing apparatus were required ; that Neilson's invention was the production and application of a hot-air blast, and was in public use, with Neilson's license, in the smelting and manufacturing of iron from

in the application of the law relating to patents, and by the authority of decided cases, determine the question in dispute between the parties. The plaintiff describes the object of his invention to be the application of anthracite or stone coal combined with hot-air blast in the smelting or manufacture of iron from iron stone, mine or ore, and states distinctly and unequivocally at the end of his specification that he does not claim the use of a hot-air blast separately as of his invention when uncombined with the application of anthracite or stone coal ; nor does he claim the application of anthracite or stone coal when uncombined with the using of hot-air blast ; but what he claims as his invention is the application of anthracite or stone coal and culm, combined with the using of hot-air blast, in the smelting and manufacture of iron from iron stone, mine or ore. And the question therefore becomes this—whether, admitting the using of the hot-air blast to have been known before in the manufacture of iron with bituminous coal, and the use of anthracite or stone coal to have been known before in the manufacture of iron with cold blast, but that the combination of the two together (the hot blast and the anthracite) were not known to be combined before in the manufacture of iron, whether such combination can be the subject of a patent.

We are of opinion that if the result produced by such a combination is either a new article, or a better article, or a cheaper article to the public than that produced before by the old method, that such combination is an invention or manufacture intended by the statute, and may well become the subject of a patent (*Rex v. Arkwright*, 1 *ante*, pp. 29, 42). Such an assumed state of facts falls clearly within the principle exemplified by Abbott, C. J. (*King v. Wheeler*, 1 *ante*, p. 317), where he is determining what is or what is not the subject of a patent—namely, it may, perhaps, extend to a new process to be carried on by known implements or elements acting upon known substances, and ultimately producing some other known substance, but producing it in a cheaper or more expeditious manner, or a better or more useful kind. And it falls also within the doctrine laid

down by Lord Eldon (*Hill v. Thompson*, 1 *ante*, pp. 285, 299), that there may be a valid patent for a new combination of materials previously in use for the same purpose, or even for a new method of applying such materials; but the specification must clearly express that it is in respect of such new combination or application.

There are numerous instances of patents which have been granted, where the invention consisted in no more than in the use of things already known, and acting with them in a manner already known, and producing effects already known, but producing those effects so as to be more economically or beneficially enjoyed by the public. It will be sufficient to refer to a few instances, some of which patents have failed on other grounds, but none on the ground that the invention itself was not the subject of a patent.

We may first instance Hall's patent, for applying the flame of gas to singe off the superfluous fibres of lace, where a flame of oil had been used before for that same purpose (*Hall v. Boot*, 1 *ante*, p. 363). Derosne's patent, in which the invention consisted in filtering the syrup of sugar through a filter, to act with animal charcoal and charcoal from bituminous schistus, where charcoal had been used before in the filtering of almost every other liquor except the syrup of sugar (2 *ante*, p. 78). Hill's patent, above referred to, for improvements in the smelting and working of iron; there the invention consisted only in the use and application of the slags or cinders thrown off by the operation of smelting, which had been previously considered useless for the production of good and serviceable metal, by the admixture of mine rubbish. Again, Daniell's patent was taken out for improvements in dressing woollen cloth, where the invention consisted in immersing a roll of cloth, manufactured in the usual manner, into hot water (*King v. Daniell*, 1 *ante*, p. 392).

The only question, therefore, that ought to be considered on the evidence is, was the iron produced by the combination of the hot blast and the anthracite a better or a cheaper article than was before produced from the combination of the hot blast and the bituminous coal; and was the com-

bination described in the specification new as to the public use thereof in England? And upon the first point, upon looking at the evidence in the cause, we think there is no doubt that the result of the combination of the hot blast with the anthracite on the yield of the furnaces was more, the nature, properties and quality of the iron better, and the expense of making the iron less than it was under the former process, by means of the combination of the hot blast with the bituminous coal.

It is to be observed that no evidence was produced on the part of the defendants to meet that given by the plaintiff on these grounds; and that it was a necessary consequence, from the proof in the cause, that from the substitution of the anthracite coal, in whole or in part, instead of or in the place of bituminous coal, the manufacture of the iron should be obtained at less expense.

It was objected, in the course of the argument, that the quality or degree of invention was so small that it could not become the subject-matter of a patent; that a person who could procure a license to use the hot-air blast under Neilson's patent had a full right to apply that blast to coal of any nature whatever, whether bituminous or stone coal. But we think, if it were necessary to consider the labor, pains and expense incurred by the plaintiff in bringing his discovery to perfection, that there is evidence in this cause that the expense was considerable and the experiments numerous. But in point of law, the labor of thought or experiments and the expenditure of money are not the essential grounds of consideration on which the question whether the invention is or is not the subject-matter of a patent ought to depend. For if the invention be new and useful to the public, it is not material whether it be the result of long experiments and profound research, or whether by some sudden and lucky thought or mere accidental discovery.

The Case of Monopolies (*Darcy v. Allein*, 1 *ante*, p. 1) states the law to be that where a man by his own charge or industry, or by his own wit or invention, brings a new trade into the realm, or any engine tending to the further-

ance of a trade that never was used before, and which is for the good of the realm, the king may grant him the monopoly of a patent for a reasonable time. If the combination now under consideration be, as we think it is, a manufacture within the statute of James, there was abundant evidence in the cause that it had been the great object and desideratum, before the granting of the patent, to smelt iron stone by means of anthracite coal, and that it had never been done before ; there was no evidence on the part of the defendants to meet that which the plaintiff brought forward. These considerations, therefore, enable us to direct that the verdict ought to be entered for the plaintiff on the third issue ; that it was a new manufacture—new as to the public use and exercise thereof within England and Wales.

On the same ground, also, the second issue is disposed of in favor of the plaintiff. No evidence was produced on the part of the defendants to show any inventor earlier than the plaintiff ; nor does the fact that there was an earlier inventor appear from the cross-examination of the plaintiff's witnesses.

As to the first issue—namely, whether the defendants have infringed the patent, we think it clearly appears on the evidence that the defendants had used, either in part or in whole, the combination described in the specification of the plaintiff's patent. The plaintiff's evidence goes fully to show certain infringements, and that is not met by any explanation on the part of the defendants. Indeed, the defendants' case did not appear to rest on this point at the trial so much as on the important question raised by them—whether the improvement described in the specification was a manufacture within the statute of James.

Upon the fourth issue, which raised no more than the usual inquiry whether the nature of the invention was sufficiently described in the specification, the usual evidence was given, that persons of competent skill and experience could, by following the directions, produce the manufacture described with success, and the evidence was entirely unopposed ; upon this issue also the verdict ought to be entered for the plaintiff.

excepted on the ground of its being generally known and used by the public, or on the ground that it was the subject of a patent that secured the use of it to a former patentee, the new patent will be good. But that distinction is as much in the knowledge of the public as of the grantee of the patent. If, indeed, the new patent had been taken out for improvements or alterations in an invention secured by a former patent, there, for obvious reasons, greater particularity would be necessary to distinguish the new from the old. But the present specification expressly says, "I take the whole of the invention already well known to the public and I combine it with something else."

Now, it is further argued that in point of law no patent can be taken out which includes the subject-matter of a patent still running or in force. No authority was cited to support this proposition, and the case which was before Lord Tenterden, and in which he held that where an action was brought for an infringement of improvements in a former patent granted to another person and still in force, that the plaintiff must produce the former patent and specification ; that at least affords a strong inference that the second patent was good (*Lewis v. Davis*, 1 *ante*, p. 406). The case of *Harmar v. Playne* (1 *ante*, p. 171) is a clear authority on the same point ; and upon reason and principle there appears to be no objection. The new patent, after the expiration of the old one, will be free from every objection, and while the former exists the new patent can be legally used by the public by procuring a license from Neilson, or by purchasing the apparatus from him or some of his agents ; and the probability of the refusal of a license to any one applying for it is so extremely remote that it cannot enter into consideration as a ground of legal objection.

On the whole, therefore, we think the verdict is to be entered for the plaintiff on all the issues except the fifth ; that the verdict is to be entered for the defendants on the fifth issue ; but that, notwithstanding such verdict, the judgment must be given for the plaintiff.

Judgment for the plaintiff.

Webster, commenting on this case, says (1 Web. P. C. 376, *note*) : The following inventions relating to the use of anthracite are referred to in the subsequent legal proceedings, as showing the previous attempts to apply that fuel in the manufacture of iron. Letters patent, June 28, 1804, to Edward Martin "for making of pig and cast iron of every description from iron stone, iron mine and iron ore, and of remelting, preparing and refining of pig and cast iron of every sort, and for the making of such pig and cast iron into wrought or bar iron by using raw stone coal and culm, to be worked and made by blast."

Specification. "I, the said Edward Martin, do hereby describe and ascertain the nature of my said invention, and the manner in which the same is to be performed, and the method I use to make stone coal and culm to stand the blast, as follows, that is to say : To light the fire in the furnace finery or hearth with free burning wood, and as soon as the wood is sufficiently ignited then to put on small quantities of raw stone or culm, free from dust, broken into the size of a common hen's egg ; to continue to feed the furnace finery or hearth with raw stone coal or culm till it is quite full of vivid fire before any blast is introduced ; then (in making pig or cast iron) charge the furnace in the common way with due proportions of raw stone or culm, clear of dust (instead of coke or charcoal), with iron stone, iron mine, or iron ore and limestone ; then to introduce the blast in a very gentle manner for the first twelve hours ; then to increase the blast gradually, day after day, for the first week of blowing, till the furnace is sufficiently hot and burdened, and then to blow to any extent the machinery or the furnace is capable of bearing, and by keeping the furnace regularly and properly fed with materials, and by keeping up a sufficient blast, the process will be completed. And in remelting, preparing and refining of pig and cast iron of every sort, and for making such pig and cast iron into wrought or bar iron, the foregoing method of lighting and feeding the hearth or finery till it is full of vivid stone coal or culm must be pursued before the finery or hearth is charged with metal, and feeding the finery or hearth with raw stone coal or culm, instead of coke or charcoal, and by introducing the blast in the proper way, the wished-for success will be produced."

Christie and Harper's patent "for an improved method of combining and applying certain kinds of fuel."

The specification, dated August 28, 1824, describes the invention to consist of combining and applying for the general purposes of fuel the common bituminous coal with stone coal, culm or anthracite, in proportions varying from one fifth to one third bituminous coal, and the remainder stone coal, culm or anthracite, the object being to use only so much of the bituminous coal as may be found necessary to keep up fire suitable for the purpose required, without producing the nuisance of smoke. "Such proportions will be found to vary according to the qualities of the coals, which vary in different situations, and according as the stove, grate or furnace in use has more or less capacity of draft or windage ; but these will be easily ascertained by trial. We have generally found one fourth bituminous coal to be a good proportion, where the bars of the grate are not more than an inch wide and half an inch asunder. The stone coal may either be applied in the usual form of such coal, or mixed with the small or culm thereof, in proportions which we recommend to be about one half, such proportions, however, varying as before according to the draft or

windage. By this combination the heat and combustion of the fire are easily kept up, and the fire of steam-engines and other large stoves and furnaces of almost every sort may be maintained."

Philip Taylor's patent, 1825, "for certain improvements in making iron. The invention, among other things, consisted in injecting carburetted hydrogen gas into the furnace in which stone was to be used, so as to supply artificially that gas the absence of which appeared to constitute a material difference between anthracite and bituminous coal.

Webster also says (1 Web. P. C. 878, *note c.*) : Plaintiff having replied to the fifth plea instead of demurring, the real issue was whether the hot-air blast used by the plaintiff was the hot-air blast protected by Neilson's patent. The pleadings admit that the plaintiff had a license from Neilson, but that circumstance does not affect the real question whether the improved apparatus for supplying the hot blast, then in use by the plaintiff and others, was an infringement on Neilson's patent, assuming the fact that the apparatus described in the specification could not produce the degree of effect or amount of temperature necessary for the plaintiff's invention. These pleadings and the trial were prior to the decision on Neilson's patent, which decided such improved apparatus to be protected by his patent.

Commenting on that portion of the argument of Bompas and Rotch which relates to the issue on the fifth plea, and the monopoly granted by an ordinary patent, Webster says (1 Web. P. C. 897) : The proviso in question is that these letters patent, or anything herein contained, shall not extend or be construed to extend to give privilege to said A B, his executors, administrators or assigns, or any of them, to use or imitate any invention or work whatsoever which hath heretofore been invented or found out by any other of our subjects whatsoever, and publicly used or exercised in that said part of our United Kingdom of Great Britain and Ireland, etc., aforesaid, unto whom our like letters patent or privileges have been already granted for the sole use, exercise and benefit thereof ; it being our will and pleasure that the said A B, his executors, administrators and assigns, and all and every other person and persons to whom like letters patent or privileges have been already granted as aforesaid, shall distinctly use and practise their several inventions by them invented and found out, according to the true intent and meaning of the same respective letters patent and of these presents." The above proviso existed in the earliest letters patent, not only in those before the clause requiring a specification (11 Anne), but also in those before the Statute of Monopolies. The object of the proviso seems to be explained by reference to the history of the times. It was the practice to make successive grants of the same thing. A statute, 6 Hen. IV., c. 15 (Web. Law and Pr., tit. Statutes), was passed declaring all such second grants to be void, unless the former grant and its determination should be recited in the second letters patent. In this case of Dudley's patent, in which this proviso appears, there had been several other grants, some of which had been surrendered ; there would also be many others practising, with greater or less success, the making of iron with pit coal. It would have been contrary to the common law of the realm that such second grant of letters patent should have been made, whereby any one would have been restrained in that which he did before. The observations of Sir E. Coke (8 Inst. 181) are material where he says, " And thus

in Bircot's case it was also resolved that if the new manufacture be substantially invented according to law, yet no old manufacture in use before can be prohibited. The question then would appear to be one of fact ; was the manufacture said to be prohibited in use before—was it in actual use ? not was it so included or involved in that which was done or published before, that its use might be conceived to have been contemplated. The words of the proviso make this clear and distinct ; it forbids to use or imitate any invention heretofore invented and found out." The proviso in effect says this—the before-mentioned grant shall not extend to give you the exclusive use of anything which was the common property of the public at the time of the grant, or of anything in which another had already an exclusive privilege. And it is material to observe with respect to the above proviso, that it differs in form and in legal effect from the other provisos contained in the letters patent ; it is not, like them, a condition upon which the grant is made, and which, if not strictly satisfied, the grant will be void or voidable, but it is a proviso for the protection of prior patentees and of the public, declaring that their rights shall not be interfered with under color of the subsequent grant. This clause would in all probability be a good plea in confession and avoidance, or a ground for repealing letters patent which had been used in fact to the prejudice of prior patentees, but it would appear to differ very materially from the other provisos above referred to. In effect, it seems to amount to a declaration that the said letters patent shall not be an answer to any action by a party for an infringement on his prior patent.

Commenting on that portion of the argument of Pollock, Richards, Smith and Webster which contends that any change in the order or mode of a mere process constitutes a new manufacture, Webster says (1 Web. P. C. 401) : A remarkable instance of this kind has recently occupied the attention of the Court of Queen's Bench in the case of *Helliwell v. Dearman*. The object of the plaintiff's invention was the rendering fabrics waterproof, but at the same time leaving such fabrics pervious to air. It appeared that before the plaintiff's patent a solution of alum and soap was made, and the fabric to be rendered waterproof was immersed therein. By this means a waterproof surface was produced on the fabric, but it was not of a lasting nature ; it wore off. According to the plaintiff's invention, the fabric is immersed first in a mixture of a solution of alum with some carbonate of lime, and then in a solution of soap. The effect is that by the first immersion every fibre becomes impregnated with the alum, the sulphuric acid of the alum being neutralized by the carbonate of lime, and by the second immersion the oily quality rendering it repellent of water is given to every fibre, so that each fibre is rendered waterproof instead of the surface only, but the whole fabric continued pervious to air.

Webster (1 Web. P. C. 404, *note*) cites a decision by Tindal, C. J. (*Jones v. Heaton*), as having held that "the patentee is bound to give in his specification the most improved state of his invention up to the time of enrolling his specification."

BERRY v. CLAUDET.

Queen's Bench, June 25, 1842.

(21 Newton Lon. Jour. 57.)

Effect of Assignment on License. Covenant.

Covenant to refund to licensee, on assignment of patent, held not to imply a covenant on his part to surrender up license against his desire.

Demurrer to declaration in covenant.

The action was brought by Beard, proprietor, in the name of Berry, original patentee, against Claudet, to compel him to give up a license to use the invention. The license had been granted previous to the assignment of the patent to Beard, so that the patent right passed subject to it. There was, however, a clause in the license empowering Claudet to relinquish the license and to recover the purchase money in the event of the patent being sold.

DENMAN, C. J. This was an action of covenant against defendant for not reselling and transferring to plaintiff or his principal all his interest under an indenture of license to exercise a patent. There is no express covenant to that effect in the indenture, but the plaintiff contends that there is an implied covenant, it being the manifest intention of the parties, apparent upon the face of the indenture, that the defendant should, under the circumstances, resell and transfer.

By the indenture the plaintiff, as agent to two French gentlemen (as trustee for whom he had obtained a patent), in consideration of £200, granted to the defendant a license to use the patent for the remainder of the term. The indenture contains a covenant that if the plaintiff should grant licenses to other persons on terms more advantageous than those granted to the defendant, he would pay the defendant such sum of money as would put him on an equality with those persons ; and then the indenture proceeds : " Provided, and it is hereby further agreed and de-

that court in favor of the patent, and the perpetual injunction against the parties in the four suits.

The petition further stated the grant of letters patent for Ireland and Scotland, bearing date October 1, 1828, and that, about the time of the trial of the above proceedings in England, the petitioner discovered that a combination had for some time existed among the Scotch ironmasters to resist the said patent, and that an agreement setting it out had been entered into, whereby the parties bound themselves in a penalty of £1,000 to institute, carry on and adopt any proceedings, both judicial and extra-judicial, which should be recommended and concurred in by the majority of the subscribers thereto, to resist the enforcement of the rights under the said patent for Scotland. That the above agreement was signed by the partners of the Househill Company, against whom a verdict had been obtained; that a bill of exceptions had been tendered to the summing up of the learned judge, which had been decided in favor of the petitioner in the Court of Session, against which decision the Househill Company had appealed, and the appeal was then pending in the House of Lords. That in August, 1842, a writ of scire facias, tested of June 13, to repeal the letters patent for England was issued, whereby the petitioner was summoned to appear in Chancery on November 2, to show cause why the said letters patent should not be cancelled. That the above writ was not issued on behalf of any persons resident in England, but on behalf of the parties in Scotland who had entered into the above-mentioned agreement for contesting the patent. That the period of fourteen years, limited by the said letters patent, expired September 11, 1842, and all the privileges thereby secured then expired. That the writ, though tested June 13, was not returnable until November 2—that is, after the patent had expired. That the proceedings by scire facias is intended only to apply to the case of existing patents, and that the remedy it affords is only to direct the cancellation of letters patent which may be in existence at the time of the return of the writ, on the ground of irregularity in the original grant. That the said letters patent having expired

during its continuance, but that monopoly has now ceased. There is no legitimate ground for issuing this scire facias on the part of the Crown, nor have the parties who obtained it any legitimate ground ; they have perfectly legal means of defending themselves, and there is no reason why parties subjected to legal proceedings on the patent for Scotland should institute proceedings in England. [Lord LYNDHURST, L. C. You ask that the writ may be vacated and set aside, and proceedings stayed. It issued correctly.] It may have been issued correctly, but it may be quashed in the same way as a commission of lunacy. [Lord LYNDHURST, L. C. A commission of lunacy is superseded although originally properly issued, because it is not proper that its operation should be continued. The staying proceedings will answer the purpose.] The ground of issuing these writs is stated 4 Inst. 88, whence it appears that they are issued by the royal prerogative, when the Crown has granted something which it had the power to grant, but which was granted upon false suggestion, to prevent the Crown being aggrieved by the grant, and to prevent injury being done to any other person by the continuance of that grant ; but the monopoly in this case having expired, there is no ground for these proceedings. This question would appear to have arisen for the first time, but it seems unreasonable that litigation should go on for avoiding a term which has expired. An application of this nature is to the discretion of the court. There is no analogy between a proceeding upon scire facias in the name of the Crown and a proceeding in the name of a private individual. Could a landlord come into equity against a tenant to set aside a lease on the ground of fraud or misrepresentation or any equitable ground, after the term of years granted in that lease so sought to be set aside has expired ? [Lord LYNDHURST, L. C. Suppose a lease which had been obtained by fraud to have expired, the covenants might still subsist, and proceedings be had upon them. Would not equity interfere to restrain the parties from proceeding upon those covenants where the transaction was fraudulent ?] There is no analogy between the two cases of the

Crown and a proceeding by a private individual as suggested. Mr. Neilson, during a term of fourteen years, has enjoyed peaceable and undisturbed possession against all the world, and when his right has been invaded he has asserted and maintained it. The monopoly had ceased before the day on which the defendant was called to answer to the writ ; there is no longer any ground for it. The vexation which the public sustain by the monopoly is the only ground upon which the writ is issued by the Crown on behalf of the public.

As to the jurisdiction, this writ issues from the common law side of the Court of Chancery ; it is returnable in Chancery ; and being issued and returnable in that manner, the Chancellor has jurisdiction. In some cases, all the further proceedings are before the Chancellor, as, if there be a demurrer ; and it is only when there are issues in fact that the record is sent to the Court of Queen's Bench. The writ in the present case is not due *ex debito justitiae* ; it is in the discretion of the Crown in all cases except where there are two patents inconsistently granted to several parties ; then the first party has a right *ex debito justitiae* to a writ of scire facias to repeal the patent granted to the other party. It is not said that the writ improperly issued and that it should be quashed ; but only that circumstances have since occurred making it unreasonable and improper that further proceedings should continue. If the Crown be bound to see that the public are not unduly vexed by a monopoly, it is also bound to protect the patentee against unnecessary litigation.

The proceeding by scire facias is one which the subject obtains of the grace and favor of the Crown, and the attention of the Crown should be drawn to all the circumstances that might govern its discretion in the matter. When a scire facias is applied for, the queen's warrant directed to the Attorney-General is obtained upon petition, and the Attorney-General may or may not grant his fiat, just as it shall appear to that law officer that the Crown should interfere or not. The proceeding is analogous to a proceeding upon a writ of right, which depends altogether on the will

should go on, or whether the fiat should be revoked ; or your lordship having the custody of the writ, before whom it is returnable, and in whose court the issue is to be made up, may make that order which shall seem meet for preventing or putting an end to all further proceedings. Your lordship has entire control over it in two capacities—1. The guardianship of the prerogative of the Crown, which if it be taken out of the hands of the Attorney-General must of necessity be in the hands of your lordship ; 2. The writ is returnable here, the defendant must plead here, and the issue is made up here, and the venire issues from the Petty Bag Office, which is your lordship's court, and the issue is sent by your lordship into one of the common law courts to be tried. In conformity, therefore, with all judicial proceedings, the control of these proceedings is in your lordship. In the case of Queen *v.* Aires it was held that upon issue joined in Chancery that court must award the venire. It depends entirely on your lordship's discretion whether the issue is permitted to be made up, or whether proceedings be stayed directly or indirectly, as by giving unlimited time to plead. The Attorney-General might well grant his fiat at the time when the record was in existence, but supposing the record to be made up and the venire to be awarded, the court of common law will be speculating on that which has ceased to exist. The complaint is that the Crown is injured through the medium of the subject having a monopoly which ought no lenger to exist. [Lord LYNDHURST, L. C. Suppose the judgment on the scire facias to be against the patent, would the proceedings for account go on in this court ? Would not that be a ground on which to file another bill ? Would this court, under such circumstances, allow the account to go on and be taken ?] [Wakefield. A supplemental bill, in the nature of a bill of review, would reach the case.] The court would not permit these circumstances to be brought up except on a case where the proceedings had been taken by the defendant himself, and in due time, and for the purpose of protecting himself in a legal manner against the proceedings meditated against him. And no proceedings of this kind

good grounds for issuing the scire facias, but these reasons may have been at an end from circumstances. There might be no ground for continuing it. It is not at all a question interfering with the authority or jurisdiction of the Attorney-General, because there may be an altered state of circumstances. The writ was applied for before the expiration of the time. There is nothing in the fact itself of the letters patent having expired because an action may be pending. [*Pollock.* It is quite clear an action may be brought against any person who, prior to the expiration of the patent, had in point of fact used the invention or pirated it.] But there is no suggestion of any such action. It is not denied that the application is made on behalf of the Scotch iron-masters. The parties to the suits in this court do not complain ; they acquiesce ; they have had an opportunity of trying the question very deliberately. Why should the scire facias be continued in England with reference to those parties who have no interest in the patent in England ? If the proceedings had been to repeal the Scotch patent, there being a case depending in Scotland, and an application by these parties who are interested to repeal the Scotch patent, I cannot say, if the patent had been repealed, that the court of Scotland could not take notice of that cancellation so as to affect the pending case, notwithstanding a judgment in the House of Lords ; it would be a new state of things. It does not appear that there has been any infringement in England, except the infringements which are the subjects of the suits here, and the parties to them do not complain. It is not suggested that there has been any infringement, and why should the party be put to the expense of trying the validity of the English patent, the term having expired ? If the patent were an existing patent, there may be an infringement, or parties may be deterred from using it. With reference to the case pending in the House of Lords, and the other suits still pending in the Court of Session, they should have obtained a scire facias to repeal the Scotch patent. The repeal of the English patent would only be an argument. [*Pollock.* Every person in the realm is interested in the

wholly and in part publicly and generally practised and used and vended within England. 5. That the defendant committed the supposed grievances by the license of the plaintiff.

With these pleas, the defendant, in pursuance of 5 and 6 Will. IV., c. 83, s. 5, delivered a notice of objections : That the patentee was not the inventor of the improvements for which the patent is said to be in force ; that the specification and disclaimer do not sufficiently describe the nature of the invention and the manner in which it is to be performed ; that the invention does not produce the effect stated in the specification, nor is such effect produced by the plaintiff in the manner therein stated ; that the invention was not new, and was either wholly or in part used and made public before obtaining the letters patent ; that the defendant had the plaintiff's license to make use of the improvements.

Ogle, on a former day, obtained a rule for the delivery of further and better particulars of the objections, against which

Martin now showed cause. The design of the legislature in requiring the notice was manifestly to communicate to the plaintiff what the objections are on which the defendant *bona fide* intends to rely at the trial, with the view of informing him as to the evidence which will be required to establish his case. The object is amply answered by the present notice. It is no objection to these particulars that they are substantially the same as the pleas themselves (*Neilson v. Harford, ante*, p. 231). In that case Parke, B., in delivering the judgment of the court, says, "The statute did not mean to say, nor do we think that the Common Pleas meant to decide, that it would not be sufficient in some cases to give notice in the terms of the plea itself. The objection may be so completely and so fully expanded on the record that a mere transcript of the plea itself may be sufficient ; in other cases, the plea may be so general in its language as to be insufficient as a notice, if transcribed from the plea merely. Each case must depend on its peculiar circumstances."

Ogle, contra. The case of *Bulnois v. Mackenzie* (2 *ante*, p. 480) is an express authority for this application. The notice delivered in this case is a mere copy of the pleas ; and in *Fisher v. Dewick* (2 *ante*, p. 490) it was expressly held that a particular "that the said improvements, or some of them, had been publicly and generally used long before the granting of the said letters patent," was imperfect, and did not give the information required by the statute. The second particular ought to have stated in what the specification was deficient in its description of the invention ; and the fourth particular, instead of objecting generally that the supposed invention is not new, and was either wholly or in part used and made public before obtaining the letters patent, ought to have pointed out those parts which had been used and made public.

LORD ABINGER, C. B. On the authority of *Fisher v. Dewick* (above), which decides that it is not enough in a notice of objection to say that a certain part or parts of an alleged invention was publicly and generally used before the granting the letters patent, but that the material parts should be pointed out, I think that the defendant must amend his fourth objection ; but as to the second, it is surely enough to say that the specification does not properly set forth the invention. The legislature never intended that the defendant should argue his case in the notice of objections. The other objections are quite sufficient.

The rest of the court concurring, the rule was made absolute as regarded the fourth objection, and discharged as to the others ; the costs to be costs in the cause, and the plaintiff to furnish the defendant at his expense with a copy of the patent and specification.

NOTICE OF OBJECTIONS.—1. *Directions for filing* by plaintiff with his declaration a notice of any objections on which he means to rely in the trial of an action for infringement are furnished by the statute 5 and 6 Will. IV., c. 83. 2. The purpose and object of the same are defined by various decisions. Courts have general power of deciding on their sufficiency when delivered under the statute therefor provided. *Bulnois v. Mackenzie*, 2 *ante*, 480. Object of act providing for notice of objections was not to limit the grounds of defence, but to limit the expense of the trial and to prevent surprise to the plaintiff. It

covering streets, roads and other ways." The declaration stated that the defendants made large quantities of wooden blocks for the purpose of paving roads according to the improvements of the plaintiff and in imitation of his invention.

Pleas : 1. Not guilty. 2. That the plaintiff was not the true or first inventor. 3. That the invention was not a new invention within this realm, but had been publicly practised and used before. 4. That the nature of the invention and the manner in which the same was to be performed were not particularly described by the specification. 5. That the said invention was not of any public use or benefit. All the defendants' pleas concluded to the country except the third, which concluded with a verification. Replication to the third plea, that the invention was, at the time of the making and granting the said letters patent, a new invention within this realm, and had not been nor was publicly practised or known before that time.

The defendants, under 5 and 6 Will. IV., c. 83, s. 5, had given a notice of objections : 1. That the mode of paving described in the letters patent was not new. 2. That the invention does not show any new method of cutting the materials. 3. "That at the time of granting the letters patent wood pavement was not practised or known in England, and the term 'paving' or 'pitching' signifies a road laid with stones endwise ; and throughout the whole patent the word 'wood' is not used, but only stone or other suitable materials of a similar nature, such as marble, granite or any mineral substance, but not vegetable substance." 4. That the patent does not apply to any pitching or covering of wood, and is not applicable to and does not authorize the making roads with wood. 5. That the specification was not sufficient, because it did not state any invention, any novelty, any new process or any new result from an old process. 6. That the plaintiff's claim is for all shapes, forms and bevels, and no angle is defined in the specification. 7. That the plan and section do not agree. 8. That no exact depth of the materials is given. 9. That the specification sometimes says half stones to be against the

curb, but the section does not show it. 10. That brick roads were tried after the invention and that so far as they are included in them the practical benefit or advantage. 11. That the invention is of no public benefit or advantage. was not new. 13. That the title of the patent is and inapplicable, if it was intended thereby to wood pavements such as have been put in practice by the defendants. 14. That the specification is deficient, because it does not describe the invention fully disclosed and made known to the public by the specification it is not described whether the materials should be laid down at right angles, base, or with each other, or at any angle, or in what order, nor do the drawings supply that defect, nor does it point out the breadth or depth of the stones or other materials. 16. That the depth, breadth and length of the other substances will depend on the mineral or other substances used, whereas neither the specification nor the drawings point out nor define what different substances are created, or how met or disposed of.

The case was opened by *Pollock, Attorney-General*, for the plaintiff, that the plaintiff had invented a block which was useful for wood pavement, the plaintiff's block being composed of two solid rhombs, placed one in the form of a single solid rhomb, placed one in other in opposite directions, so that each side of the plaintiff's block was bevelled both inward and outward. This block had been imitated by the defendants, whose blocks consisted of a single solid rhomb, which the defendants then fastened together so that two of the defendants' blocks fastened together by pins, as they were intended to be, were exactly equal to one of the blocks of the plaintiff; and if one of the plaintiff's blocks were cut in half, so as to detach the two solid rhombs of which it consists, the two parts would be each of them the same as one of the defendants' blocks.

It appeared from the defendants' notice of action delivered under section 5 of the statute 5 and 6 of

ticular angle is essential, or whether useful and beneficial. It must because if it was a right angle it the specification leave it to express is the proper angle, it is not good benefit, it will do.] Moreover, not apply to wood pavement.

ment in actual use in the year 18 patent ; and then comes the question to anything but stone or some ABINGER, C. B. I think that the "table material " include a wood which the plaintiff never contemplated

Kelly addressed the jury for that the plaintiff's invention was named M'Carthy had in the year for a pavement, in which each block inward and two bevels outward block ; and that if the plaintiff that one of his blocks cut in two of the defendants' blocks, it would of Mr. M'Carthy's blocks cut in two of the blocks of the plaintiff block were not to be considered as M'Carthy's, the defendants' come same as the plaintiff's.

An examined copy of Mr. M'Carthy's put in, and it was proved by Lord the invention there described witness's.

Pollock, Attorney-General. If you take M'Carthy's block and cut inward and outward on the same

Lord ABINGER, C. B. You can by cutting M'Carthy's block into the defendants' block by cutting four, and there is an end of original probably the jury think so too.

The Foreman of the Special Jury.

Kelly. The jury ought to be discharged as to the other issues.

Pollock, Attorney-General. If the jury are satisfied in favor of the defendants as to one issue which goes to the whole case, I think I ought not to keep up the cause merely to determine the other issues.

Verdict for the defendants on the second issue, and the jury discharged as to all the other issues.

Lord ABINGER, C. B. I may now say that my opinion was against the plaintiff as to the angle not being stated, and that the specification in that respect was insufficient.

Verdict for defendants.

Re SIMISTER'S PATENT.

Privy Council, Dec. 8, 1842.

(4 Moore Privy C. C. 164.)

Utility as a Test upon Application for Extension. Presumption as to Utility. Negligence in restraining Infringement.

The fact of an invention, when known, not getting into general use is a presumption against its utility.

It seems that negligence on the part of the patentee in restraining infringement is a ground of opposition.

The extension of the term of letters patent refused, although the profit derived from the patent article was less than the expenditure incurred upon the patent, the utility of the invention being small.

Application for extension.

This was an application for an extension of the term of the petitioner's patent of December 18, 1828, for "improvements in weaving, preparing or manufacturing a cloth or fabric, and the application thereof to the making of stays and other articles of dress, which improvements are also applicable to other purposes."

The petition described the method of making stays before the date of the patent—namely, by sewing or stitching two pieces of cloth together, in such manner as to leave the

requisite spaces for the introduction of the whalebone or other materials, and stated experiments by the petitioner during three years, and his discovery of a method of weaving a double fabric suitable for stays, the requisite open spaces being left in the process of weaving. The petition then stated the expenses incurred and difficulties encountered in making and introducing the invention, particularly the opposition by the wholesale houses, and the prejudice created by reports industriously circulated, that the stays would not bear washing. The petition then stated the particulars and expense of the litigation in which the petitioner had been involved; that no profits had been received for some time, and that the profits during the last six years had not equalled the petitioner's losses; so that on the whole there had been a loss on the invention. A disclaimer had been enrolled as to so much of the invention as did not relate to stays.

The notice of objections stated, as grounds of opposition, various objections to the validity of the patent—that the petitioner had compromised the legal proceedings referred to in the petition by the payment of money, with the view of prejudicing and deterring other parties known to the petitioner to be infringing the patent; that in consequence of the petitioner's not interfering to stop such infringements, the opponents had embarked a large capital in machinery for manufacturing the stay fabric by steam power; and that it was not until the fabric so woven by steam power drove out of the market the fabric woven in the loom that the petitioner thought of amending his patent by disclaimer with a view to the present application.

Hill and Webster appeared for the petitioner; *Follett, Solicitor-General*, and *Cowling*, for the opponents.

The witnesses described the old or stitched stay to have been made by sewing together two pieces of fabric at certain intervals for the interstices into which the bones, wadding or other materials were to be inserted; whereas, according to the petitioner's invention, the proper interstices were left, and the cross-stitching, according to the particular pattern of the stay, put in during the weaving of the fabric in the

MUNTZ v. GRENFELL.

Chancery, V. C., Dec. 23, 1842.

(7 Jur. 121.)

Injunction before establishing Right at Law.

Where parties have not only formed a contract with a patentee for the working of his patent, which in substance recited that it was valid, but have also joined him as co-plaintiffs in a suit against, and in a motion for an injunction to restrain, certain persons from infringing his patent, which suit was conducted by their private solicitor, and of which motion the chief support was an affidavit made by the patentee, in which he swore precisely to the originality of the patent, the court will, for the purposes of an interlocutory application for an injunction to restrain them from infringing the patent until its validity has been tried at law, consider the same to be valid as between them and the patentee.

Motion for an injunction.

This was a motion on behalf of the plaintiff, George F. Muntz, for an injunction to restrain the defendants, Charles P. Grenfell and Riversdale W. Grenfell, from using an invention of the plaintiff for making metal plates for sheathing the bottoms of ships. The patent and specification in question will be found in *Muntz v. Varian, ante*, p. 122. In September, 1833, Pascoe Grenfell and the defendants, who were then copper merchants, executed an indenture with the plaintiff, reciting that the plaintiff had obtained and was entitled to the letters patent specified ; that the plaintiff and Pascoe Grenfell and the defendants had agreed to become partners in the business of manufacturing and vending metal plates, bolts and other ship-fastenings, pursuant to the letters patent ; and the plaintiff agreed that, in consideration of the sum of £1,000 to be paid to him by the firm of P. Grenfell & Sons, the said letters patent should be vested in plaintiff and the said P. Grenfell, C. P. Grenfell and R. W. Grenfell jointly ; and that plaintiff would assign them accordingly. The partnership business was not actually begun until September, 1837, when the plaintiff, Pascoe Grenfell, and the defendants commenced working the patent, under the firm of Muntz's Pat-

afford a good composition ; but the proportions may be varied or other metallic substances added, provided the property of bearing the mechanical process when heated be not destroyed. The exact degree of heat is not defined, as it may vary according to the nature of the metallic compound. I have found a low red heat proper for the purpose of working the above composition.

" 3. Of the white sheathing, which consists of tin, lead, zinc, copper, regulus of antimony, or any other metal or semi-metal capable of being mixed together by heat, and formed either by casting or any other mechanical process into plates or pieces proper to lay upon a ship's bottom. Sixteen parts tin, sixteen parts zinc and one part copper form a good mixture.

" In the foregoing description I have considered one example in each class as necessary to explain the nature of my invention or improvement. I do not, however, consider any particular compound of metals or semi-metals, or any mechanical process which may be necessary to give the proper form as constituting my claim to an exclusive right (for all these may have been employed before for other purposes) ; but I declare that my invention and improvement, and the principle thereof, consists in the application of various metallic or semi-metallic compounds to a purpose to which they have not been before applied, and from which they appear to me, from their superior ability to resist the corrosion of sea-water, preferable to the materials at present in use."

In January, 1838, Pascoe Grenfell died ; but the patent business was continued by the plaintiff and the defendants. In May, 1841, the defendants gave the plaintiff a month's notice, pursuant to the proviso on that subject contained in the partnership deed, to put an end to the partnership ; and accordingly, on the 17th of June following, the same ceased, and the plaintiff gave up to the defendants the mills in which the partnership business had been carried on. The plaintiff alleged that, upon the formation of the partnership, he explained to the defendants the mode of working his patent ; that the sale of the article so manufac-

pp. 59, 97 ; Hornblower *v.* Boulton, *id.*, p. 98 ; Hill *v.* Thompson, *id.*, pp. 285, 299 ; Hullett *v.* Haig, *id.*, p. 453 ; Bowman *v.* Taylor, 2 *ante*, p. 60.)

Parker and Hetherington, for the defendants. The issue to be tried is whether or not the plaintiff's patent is valid. The *Repertory of Arts* for the year 1800 contains the specification of a patent granted to a Mr. Collins, precisely similar to that alleged to be the invention of the plaintiff ; this at once destroys the originality of his patent. The plaintiff has had no exclusive, uninterrupted enjoyment of his patent. It was never worked until September, 1837, and during the period that elapsed between that year and the dissolution of the partnership frequent infringements of the patent occurred. It is true a bill was filed against Messrs. Vivian & Walker to restrain them from infringing the patent ; but the plaintiff has never, as he might have done, tried his right at law. The only point in which the plaintiff attempts to show that his invention differs from that of Mr. Collins is that it is made of the "best selected copper," an article which he contends did not exist in the year 1800 ; but this distinction, supposing it to exist, would only tend to show that the plaintiff is entitled to have a patent for an improved mode of making copper sheathing, and not for the discovery of any new principle. (Carpenter *v.* Buller, 8 Mee. & W. 209 ; Collard *v.* Allison, *ante*, pp. 78, 110.)

BRUCE, V. C. The first question is whether, for the limited purpose of the present interlocutory application, and as between these parties only, the patent is or is not to be taken to be valid. The utility of the process is not questioned. The specification has not been strongly attacked, and it appears that there has been a conviction on the part of the defendants that the invention is the plaintiff's, and that the specification is not insufficient. Another question is as to the originality of the alleged invention. Now, how does that stand on the evidence ? The patent is dated October 22, 1832. Negotiations took place during the following year between the plaintiff and defendants for the purpose of working (as it is called) the patent in part-

merits, for no one seemed to dispute that it was a meritorious invention. At first, therefore, it had no considerable sale ; but in 1837 the patent appeared to be set actively at work, and was more known and taken up by the trade. Between 1838 and 1841 there was an attempt made to invade it by a party named Cutler, but he soon desisted. There are only three other instances of infringement, one by Vivian, another by Newton & Lyon, and a third by Freeman. Against this there is that species of enjoyment by the plaintiff which has taken place to the extent before mentioned previously to the partnership, and a substantial, full and complete enjoyment during 1838, 1839 and 1840. If the view I take be correct as to the manner in which I have for the present purpose treated the question of the validity of the patent, I think I must consider the infringement as a slight circumstance. I shall therefore order the injunction as between the present parties, the plaintiff undertaking to abide by such order as the court may think fit as to compensation, and undertaking immediately to bring his action to try the question of the validity of the patent, the trial to be in Middlesex, the plaintiff to commence within a week, unless prevented by the defendants, and to deliver the declaration in three weeks.

Ordered accordingly.

INJUNCTION.—Injunction against infringement continued until plaintiff should have time to establish validity of patent at law ; but defendant ordered to keep an account and to grant plaintiff an inspection. *Beaumont v. George*, 1 *ante*, 499. Injunction having been dissolved, with leave to plaintiff in suit to bring action to establish patent, defendant to keep account of profits meanwhile, and verdict sustaining patent having been rendered at law, plaintiff moved to revive injunction, whereupon defendants intended to move for a new trial of the action at law. *Held*, that this application should stand over until the result of the application for a new trial should be known, and that in the mean time defendant's accounts should continue to be taken. *Hill v. Thompson*, 1 *ante*, 299. *Bill to obtain injunction* against infringement need not set out specification in precise terms, allegation that it exists being sufficient. *Brown v. Moore* 1 *ante*, 220. *Preliminary injunction* will not ordinarily be granted pending a trial at law in a case where plaintiff can be protected by ordering an accounting. *Jones v. Pearce*, 1 *ante*, 464. Court must grant or refuse injunction in case of alleged infringement, according to the opinion it may form after an examination of the affidavits. *Hill v. Wilkinson*, 1 *ante*, 826. May be granted on proof of possession and public acquiescence. *Harmer v. Planc*, 1 *ante*, 166.

objects to some part of the improvement as not new, he will be required to state what part is not new. The first objection is addressed to the principle, not to the use of the invention ; that the principle is not new, having already been the subject of two patents and contained in published works. Two specifications are pointed out, and it could never be intended that a defendant should give an account of all the cyclopædias in which the subject is mentioned. [TINDAL, C. J. You may have kept your best evidence behind, and then start on them some article in an encyclopædia.] The objection is that the principle is perfectly notorious ; that the obtaining starch from farinaceous matters was well known to the chemical world. Suppose a person were to claim a patent for making rum from sugar or molasses, surely any one would be entitled to say that is not a new principle, it is disclosed by all the scientific publications of the day. The plaintiff's witnesses, who come to support a patent like this, ought to be in a situation to know whether it has been discussed in the leading scientific treatises of the day ; the use of a particular substance to a certain extent, and so far as the plaintiff may have considered secretly, and yet large enough to invalidate the patent, seems to stand on a different ground.

The objections to the specification are specific, and the defendant is willing to strike out the general words at the end.

The last objection specifies the purpose for which and the place at which the invention is said to have been in use ; this is different from the cases in which the question has been whether names should be given, and is sufficient, looking at the nature of the invention. The case of *Bulnois v. Mackenzie* (2 *ante*, p. 480) decided that it would be going too far to require the names and addresses to be given. The case of *Fisher v. Dewick* (2 *ante*, p. 490) does not apply to the names and addresses of the parties. [*Bompas*. The report of that case does not go to the full extent ; the Lord Chief Justice in all the pleas struck out the words "and other persons."] If the objection had been simply that the invention was used by certain persons, without giving

any information as to their particular trade, it would have been sufficient upon the authority of the cases.

Bompas, in support of the rule. These objections are insufficient in respect of certain words which tend to throw them open, and make them no notice whatever. The difficulty in respect of the words, "other books and writings," at the end of the first objection, is this : A witness comes into the box to give evidence. A book is put into his hands which he has never seen before, and he is asked to give his opinion as to whether what is there described is within the patent. The witness cannot give a satisfactory answer on a long statement at once ; he is taken by surprise. It is essential, in applying the testimony of scientific men, that the witnesses should have had an opportunity beforehand of seeing such statements. The evidence to be given is not like the knowledge of a fact which he is bound to know ; it is an opinion on a long scientific statement. It is impossible for satisfactory and consistent evidence to be given in such cases without an opportunity of prior examination. And as regards written published accounts, the defendant cannot be prejudiced, since he may have the notice amended within any time of the trial that a judge may think reasonable. This is not a case in which there can be any tampering with witnesses or evidence ; each party has a fair opportunity of examining it, and forming his opinion upon it. If this be not done, the witnesses may be taken by surprise, and the effect of the trial thereby rendered abortive. The peculiar nature of patent cases requires that the plaintiff should have notice of all written documents or publications intended to be adduced in evidence. In the case of *Fisher v. Dewick*, the Lord Chief Justice struck out the words "divers other persons," the notice having mentioned certain persons, remarking at the same time, "If the defendant discovers other persons not named in these objections, he has the power of applying to a judge to add them," and this case is precisely the same as that.

As to the objection that the plaintiff Jones has not described the best method with which he was acquainted, we

have no idea what is meant. [TINDAL, C. J. You must know, if you at one time thought of putting such a method into your specification. It lies within your own knowledge better than the defendant's. The defendant cannot prove it unless something of that sort has taken place.] [EKS-KINE, J. Suppose the defendant to prove that you have produced an article which clearly could not be produced by the mode described in the specification, by what other mode the witness cannot say, would not that be evidence to show you had not described the best mode with which you were acquainted ?]

The fourth objection is nothing more than the plea that it was used publicly. [MAULE, J. It goes farther. Persons of a particular trade at Nottingham and elsewhere.] That is not at all within what the court decided in Fisher v. Dewick. The invention was improved machinery in making lace ; it was quite clear that could only be used by persons making lace. [MAULE, J. But the making of machinery is comparatively in few hands ; it is not at all like a person exercising some handicraft, or producing some article in daily use. But when you say there is a patent for a steam-engine, that is a different thing. There would be no difficulty in finding out all the steam-engine makers.] There the case was limited. The objection was that it was in use by certain persons who must necessarily be lace-makers. [MAULE, J. No ; makers of lace machinery.] [TINDAL, C. J. Is there any objection to insert the word generally ?] Each party must then produce all the lace manufacturers to prove that it was generally or not generally used. There has never been a case in which such language was permitted ; in every case some names have been given, and the only question has been whether the words "other persons" should be retained, or some names given. It is of great importance that we should know some, because then we might trace out others. [MAULE, J. It may be that the defendant has no clew to find it out. Suppose his evidence to be that there is a great deal of lace in the market ; you cannot tell who made it, but you may be able to tell that starch has been used in the manufacture.] If it

had been said that lace had been sold in the market by certain persons, the case would have been different; but no clew whatever is given. In *Fisher v. Dewick* the lace could be identified. There was a particular spot made in the lace, and by examination it could be ascertained whether the lace was made by that machinery. If the word "generally" were inserted, that would bind the defendant to show a general use, and they would not succeed by showing it used by one or two. [ERSKINE, J. The statement is, "Used by many persons."] Evidence of one person could be offered under such circumstances. [ERSKINE, J. I should have very considerable doubt of that.] [Channell. I believe the process was generally known, but not generally used, because the trade knew a better.] [ERSKINE, J. The objection is not to be made, unless the objection given be proved. If the notice of objection is that it was used by many persons, and you only prove that it was used by one, you do not prove your objection.] In *Fisher v. Dewick* the objection was, that previous to the patent means were known and publicly used whereby ornamental spots were formed, etc., and by divers other persons, in England and elsewhere. The Lord Chief Justice struck out the words "divers other persons," and yet that related to a much more narrow view than this, for the persons using bobbinet lace and making the spots extends only to a branch of the lace manufacture. [TINDAL, C. J. That was a patent for some improvements in machinery, not for making lace.] The statute contemplates a *bona fide* notice; the notice in this case practically gives no further information than the pleas, which state the invention to have been in use before the patent.

TINDAL, C. J. The new rules were made before the statute; therefore we are not at liberty to say that the legislature did not at the time contemplate the existence of those rules, or were not aware that, in an action for the infringement of letters patent, the plea of the general issue could no longer be pleaded, but that the different objections must be raised on the record. And that being so, we think

of the party now objecting to the notice of the objections.

The third is, "That the said invention was in use by many persons before and at the time of the date of the said letters patent, and particularly that the use of rice as and for starch, and the preparing rice flour to be used as starch, and the preparation of starch from whole rice and from rice flour, were known and practised by persons engaged in the manufacture and finishing of lace and similar fabrics, and in the clear-starching and otherwise dealing with lace and similar fabrics at Nottingham and elsewhere." Therefore it appears to me that if the words "and elsewhere" are struck out, substituting the places afterward, if new evidence should arise within the defendant's power to produce at the trial, that there is no objection to this form of stating the objections in the notice. For I think this case is distinguishable from that of Fisher *v.* Dewick (*2 ante*, p. 490), in which the patent was for alterations and improvements in the manufacture of the machinery by which lace was made. And it is a very possible thing that the use of particular wheels or cranks, or mode of making machines, may have been known and used in the particular manufacture, or in houses, but only known by those persons who were so using them. And therefore, unless the names of those persons were given, nothing is disclosed at all. At all events, if you are at liberty to add the names of persons and of others, you may only mislead the party. But this is a patent for the making of starch generally; and this notice of objections does limit the inquiry to a particular species and class of persons who are using it in a particular trade. The defendant says, I mean to object you shall not have your patent for making starch generally, because the invention was in use among persons of this particular class—namely, lace manufacturers and clear-starchers in the town of Nottingham, and by many of them. It is quite as open for the plaintiff to make inquiry in Nottingham, among persons of that description, as for the defendant to do it. I think he is not misled, but the field is open to him; the words "and elsewhere" would open it

too much against the plaintiff, and, therefore, those words should be struck out.

ERSKINE, J. I am of the same opinion, that the legislature must be taken to have intended that something more particular than the form of pleading, as then established by the rules of the judges merely, should be included in the objections given. What the court has to say is whether the objection is stated with reasonable particularity. It appears to me that the limitation my lord has just stated as to the objection made on the present occasion would give sufficient intimation to the party of the nature of the objections, so as to prevent his being misled by them, which is all the court are called on to do.

MAULE, J. I also think that, with respect to the notice of objections and the naming the persons, the act of Parliament requires some statement more precise, and narrowing the objections intended to be relied on, than that required by the rules of pleading, which must be taken to have been known by the legislature at the time the act passed.

The case of Fisher *v.* Dewick was for an improvement in machinery for the manufacture of lace, and the reason why the objection in effect was held not to be sufficient there was, because the machinery for making lace—that is to say, the invention for which the patent was obtained, was itself in use by certain persons named and by other persons. That is no restriction or particularization of the simple objection or statement in the plea, that the alleged invention was in use before the patent. So that there the objection was quite as wide as the plea. And in order to narrow it the way in which it was suggested it should be narrowed was by naming the persons who had so used that alleged invention. The objection here is not that certain persons and certain other persons before the patent had used the same process for operating on farinaceous matter in obtaining starch and improving the making of starch generally, but it narrows it extremely. The objection excludes all publicity except the public use of a particular kind of starch—namely, rice starch, and for a particular purpose. I think that is clearly much narrower than the objection of

Of scientific persons that invention will answer is sufficient ; each part need not be tested. *Neilson v. Harford*, 190.

EXCLUSIVE POSSESSION.

Injunction. In order to entitle a party to injunction, possession and enjoyment must have been undisturbed and exclusive. *Curtis v. Cutts*, 1.

EXPERIMENT.

Experimental use by patentee is not prior public use. *Gillett v. Wilby*, 70.

Mere experiment or experiments for purpose of producing a result which is not brought to its completion, but begins and ends in uncertain experiments, is not such an invention as should prevent another person who is more successful from having the benefit of it. *Galloway v. Bleaden*, 90.

If experiments are necessary for the production of any beneficial effect, the patent is void. *Neilson v. Harford*, 190.

EXTENSION.

Application for. *Re Kollman's Patent*, 9 ; *Re Downton's Patent*, 52 ; *Re Kay's Patent*, 56 ; *Re Bodmer's Patent*, 111 ; *Re Quarrill's Patent*, 117 ; *Re Jones's Patent*, 118 ; *Re Woodcroft's Patent*, 188 ; *Re Simister's Patent*, 510.

Applications for, are not granted as a matter of course. Judicial Committee's jurisdiction is extraordinary, and is to be exercised only on the most special grounds alleged and proved in each case. *Re Jones's Patent*, 118.

Equity. Practice respecting hearing of counsel where several parties enter caveats. *Re Woodcroft's Patent*, 188.

Fact of invention not having been brought into use being explained by the pecuniary embarrassments and difficulties of the patentee, extension recommended. *Re Wright's Patent*, 8.

Grounds for. Insufficiency of usual term to afford remuneration, regard being had to the merits of the invention and its usefulness to the public, *held* a sufficient ground for extension. *Re Jones's Patent*, 118.

Grounds for granting. Violent opposition to introduction of meritorious invention, which has prevented patentee from realizing a profit, *ia*. *Re Roberts's Patent*, 5.

Grounds for. Invention being meritorious, but from circumstances beyond control of patentee not having been sufficiently appreciated and not productive of reward, extension recommended. *Re Kollman's Patent*, 9.

If letters patent are about to expire, an application for an extension will be heard during the pendency of legal proceedings as to the validity of the patent. *Re Kay's Patent*, 56.

May be granted to administratrix of patentee. *Re Downton's Patent*, 52.

proved process may also be, if the improvements amount to a new invention and a new manufacture, the specification must distinctly show the fact and the evidence completely sustain it. *Gibson v. Brand*, 405.

INFRINGEMENT.

- An improvement may constitute. *Neilson v. Harford*, 281.
- If the defendants sold an article of exactly the same fabric, made in the same manner as that for which the patent was taken out, such sale may be considered as a using of the invention and an infringement of the patent. *Gibson v. Brand*, 812.
- In an action for, defendant cannot by his notice of objections go beyond his pleas. *Macnamara v. Hulse*, 504.
- In a suit for, defence that patent is illegal must be pleaded specially. Notice of objection is not sufficient. *Gillett v. Wilby*, 70.
- Is a copy made after and agreeing with the principle laid down in the patent. *Galloway v. Bleaden*, 90.
- Is a question for the jury. *Walton v. Potter*, 162.
- It seems that if an invention for which a patent is granted would if put into practice be useful, an action for the infringement of the patent may be maintained, although the plaintiff's invention has never been put into actual use, except by the defendant when he infringed the patent. *Macnamara v. Hulse*, 504.
- Negligence on part of patentee in restraining infringement is a ground of opposition. *Re Simister's Patent*, 510.
- Patents may be taken out for the same object by several patentees provided the subsequent inventions rest upon the skill of the inventor and have been made without reference to or are not borrowed from the former. *Walton v. Potter*, 162.
- Specious variation in form or ingenious alteration in the mode of adaptation constitutes an infringement. *Walton v. Potter*, 162.
- The doing any of the acts specified in the prohibitory clauses of the letters patent is an infringement. The defendants are not to resemble or counterfeit; they are not to make any addition to, or any subtraction from, it, availing themselves of that which is in truth the subject-matter of the patent; so as by such alteration to pretend that they are the true inventors of that article. *Walton v. Bateman*, 418.
- Though all the improvements claimed must be shown by plaintiff to be new, an imitation of one constitutes an infringement. *Gillett v. Wilby*, 70.
- Though the matter may not have been used, the party is not entitled to his patent unless he is the first and true inventor; therefore if the subject-matter has been discovered, has been published in a dictionary, for example, though it has not been reduced into practice, if a man merely adopts it, the

If answer deny novelty of invention or right to enjoyment under letter patent, it is imperfectly set forth, or fails to dissolve an injunction, giving plaintiff liberty to proceed, it admits by his answer a principle comprised in the doctrine of laches.

Patentee brought claim for damages, previously moved for an injunction, and opinion that on the evidence he would not have been entitled to injunction, refused to retain him, and opportunity of establishing his rights was lost, and costs. *Bacon v. Spottiswoode*, 100 U.S. 403.

Motion for injunction. *Wilson v. Tin Whistle Co.*, 100 U.S. 403; *Muntz v. Grenfell*, 100 U.S. 403.

Motion for injunction to restrain infringement.

Motion to revive. *Neilson v. Hullemandel*, 4 U.S. 102.

Possession and enjoyment to sue for infringement. An action can be tried in the place where the plaintiff resides, and exclusive jurisdiction given to the court where the plaintiff resides. *Curtis v. Muntz*, 100 U.S. 403.

Refused where there appears to be no infringement, and the process used by the plaintiff is not that used by the defendant. *Muntz v. Viola*, 100 U.S. 403.

Renewal of motion for injunction.

Restraining infringement of a patent. Renewal of motion for injunction at law directed to defendant.

An interlocutory order made almost as matter of course, though almost as matter of course, mode of making the final judgment shows to be necessary.

Retained upon conflicting evidence. *Lockwood v. Hullemandel*, 4 U.S. 102.

See note, p. 521.

Should not be granted where plaintiff has not sued the defendant. *Neilson v. Hullemandel*, 4 U.S. 102.

Specification must tell for what purpose application for injunction.

Suit for injunction. *Parkin v. Harrison*, 100 U.S. 403.

To secure, patentee must first sue for injunction. *Harrison v. Harrison*, 102.

When court has interfered in suit for injunction on terms of injunction, it may deprive plaintiff of injunction, and plaintiff may proceed with his action.

Do not do this if defendant does not sue for injunction. *Ford v. Skewes*, 11.

Where parties have not only



to imply a covenant on his part to surrender up license against his desire. *Berry v. Claudet*, 485.

Effect of assignment on. *Berry v. Claudet*, 485.

Exclusive license not invalid if districts or district covered by license included whole extent of patent. *Protheroe v. May*, 80.

Exclusive. Grant of exclusive license to use a patent, though patent may be vested in twelve persons, does not invalidate patent itself ; and it is wholly immaterial to its validity in what number of persons such license is vested, whether exclusive or not. *Protheroe v. May*, 80.

Facts considered, and *held*, that where, after litigation between licensee and licensor of patent for process, an agreement is made in writing, and licensor institutes proceedings to compel licensee to keep terms of such agreement, and licensee institutes cross suit to suspend licensor's proceedings on the ground that the process used by licensee does not fall within licensor's patent, licensee could not set up such a defence to the claim of the licensor. *Baird v. Neilson*, 892.

See note, p. 402.

Where a patentee takes out different patents, each jointly with each of several parties, defendants in a suit by plaintiff to recover an agreed yearly sum, a consideration for a license issued by plaintiff to these several parties, defendants, and defendants plead that at time of plaintiff's granting such license the particular patent in suit was not a new invention, whereby grant was void, *held*, that defendants' declaration was bad on ground of variance, as there were other parties to interest of the first part besides plaintiff ; and that plea was a bar to the action. *Chanter v. Leese*, 41.

MEMORANDUM OF ALTERATIONS.

If memorandum goes beyond the act, it is void and cannot be given in evidence or made any use of. *Re Sharp's Patent*, 126.

Master of the Rolls has no jurisdiction to remove from the records of the Court of Chancery a memorandum of alterations of the specifications, enrolled under 5 and 6 Will. IV., c. 88, s. 1.

NOTICE OF OBJECTIONS.

See *Scire Facias*.

If the objections are not sufficiently specific, the plaintiff's course is to apply to a judge for an order for a more specific notice. As a rule the objection must be more specific than the plea ; but if latter sets out the objection in full, an objection in similar terms is sufficient. *Neilson v. Harford*, 231.

In an action for infringement, defendant cannot by his notice of objections go beyond his pleas. *Macnamara v. Hulse*, 504.

Must in general be more specific than the pleas ; and it must be such as to convey to the other side reasonable information as to the points to be relied on. *Jones v. Berger*, 522.

Requisites of. That the patentee "did not state in his specification the most beneficial method with which he was then acquainted of practising his said invention," is a sufficiently precise objection. *Jones v. Berger*, 522.

Requisites of. Where any published work is intended to be relied on as showing the invention not to be new, the particular work must be described. *Jones v. Berger*, 522.

Rule absolute by court for delivery of better particulars as regarded deficient objection. *Heath v. Unwin*, 501.

See note, p. 508.

Should be drawn with reference to the pleas, or notice given of the pleas to which the objections are to be applied. *Walton v. Bateman*, 418.

Statement in, that specification is calculated to deceive, is sufficient to let in evidence as to any particular passage being false. *Neillson v. Harford*, 281.

Where the objection simply states the specification to be insufficient, if the plaintiff is contented to take that as notice, any objection may be made at the trial to show that the specification is insufficient. *Neillson v. Harford*, 281.

NOVELTY.

If the invention be new and useful to the public, whether it is the result of long experiments and profound research, or has been reached by some sudden and lucky thought or mere accidental discovery, is not material. *Crane v. Price*, 438.

Objection to, gives rise to two questions : 1. Was any article made before answering the purposes and having the properties of that patented ? 2. Whether the user of it was not to be regarded as an experiment rather than a public use ? *Walton v. Bateman*, 418.

Patentees claimed eight several heads of invention. *Held*, that in order to support their patent, they were bound to show that each of the parts was new. *Gibson v. Brand*, 405.

Plea that invention is not a new manufacture known in England admits the invention to be a manufacture and puts in the issue of novelty. *Walton v. Potter*, 818.

Prima facie case of, made out by calling persons who are conversant with the subject of the patent and who pass their time in understanding the nature of patents, and in following up and discovering what inventions are going on from week to week, to say that they had not heard before that there had been such a discovery previous to the grant of the patent. *Galloway v. Bleaden*, 90.

Prima facie case of, necessary to call other side to show affirmatively that invention is not new. *Galloway v. Bleaden*, 90.

v. Neild, 435 ; Smith *v.* Watson, 487 ; Macnamara *v.* Hulse, 504 ; Protheroe *v.* May, 80.

Writ of error to review a judgment of the Court of Exchequer.
Chanter v. Leese, 41.

PUBLIC USE.

Question of, is for the jury. *Elliott v. Aston*, 118.
See Use.

QUESTION FOR JURY.

Whether patentee has given such a description of his invention and of the manner of carrying it out as will enable a workman of competent skill in that line of business to act upon it, is. *Walton v. Bateman*, 418.

RENT.

If a manufacturer can successfully resist the patent right of the party claiming rent for its use, he may do so in answer to an action for the rent. *Neilson v. Fothergill*, 146.

REQUISITES FOR EXTENSION.

The questions are, is it a useful invention ; is it beneficial to the public ; is it an invention of that character which would lead us to interpose ; is there ingenuity in the invention and has the party been remunerated ? *Re Downton's Patent*, 52.

REQUISITES OF SPECIFICATION.

See note, p. 318.

SCIРЕ FACIAS.

It seems that two different parties cannot each have a writ of. *Queen v. Neilson*, 491.

To repeal a patent. *Queen v. Nickels*, 390.

To annul patent. *Queen v. Walton*, 486.

To repeal a patent. Prosecutor having, while record was in Chancery, filed notice of objections under statute 5 and 6 Will. IV., c. 88, s. 5, namely, that other persons than the patentee had used the invention in England before grant of patent, the Court of Queen's Bench refused, on motion after proceedings were brought therein, to order delivery of a particular stating the names and addresses of such persons. *Queen v. Walton*, 386.

Writ of, to annul letters patent does not issue as of course. *Queen v. Neilson*, 491.

SEALING OF LETTERS PATENT.

Identity of purpose and not of name is the criterion in judging of the similarity or dissimilarity of inventions. *Re Cutler's Patent*, 13.

Utility not always necessary to be considered. *Re Cutler's Patent*, 13.

SPECIFICATION.

- All the substances which will answer the purpose need not be stated if the public be not misled. *Bickford v. Skewes*, 290.
- And patent should be construed together in determining validity. *Neilson v. Harford*, 190.
- Construction of, is for the court, the meaning of the words and surrounding circumstances having been ascertained by the jury. *Neilson v. Harford*, 281.
- In framing the specification, the objects of the invention and the means whereby those objects are to be attained should be kept distinct. *Gibson v. Brand*, 312.
- Intelligibility of, is question for jury. *Neilson v. Harford*, 190.
- Is addressed not to persons entirely ignorant of the subject-matter, but to artists of competent skill in that branch of manufactures to which it relates. *Bickford v. Skewes*, 290.
- Language of, ought not to be astutely construed so as to overthrow a patent. *Bickford v. Skewes*, 290.
- Must contain such a fair and clear statement that a person with a competent degree of knowledge upon subject-matter of patent would be able to make that which patentee enjoys exclusive privilege of. *Galloway v. Bleaden*, 90.
- Must contain such description as would enable a workman of competent skill, conversant with the trade, to carry the invention into effect. *Elliott v. Aston*, 113.
- Must distinguish between what is claimed to be new in the invention and what is admitted to be old. Otherwise the presumption is that the patent extends to the whole and to every part. *Carpenter v. Smith*, 889.
- Novelty. Where specification divided invention and subject-matter of patent into two parts, *held*, that even if the invention were considered single and entire, yet if part of what was claimed were not properly the subject of a patent or not new, the whole must be void. *Kay v. Marshall*, 35.
- Objection to, must be clearly stated. *Bickford v. Skewes*, 290.
- Omission in, of anything which may be necessary for the beneficial enjoyment of the invention is a fatal defect. *Neilson v. Harford*, 190.
- Parol evidence is not admissible to supply the deficiency where specification fails to distinguish what is new from what is old in invention. *Queen v. Nickels*, 390.
- Patentee is bound to disclose in, the most beneficial mode with which he is acquainted. *Neilson v. Harford*, 281.
- Should distinguish what is new from what is old. *Queen v. Nickels*, 390.
- Sufficiency of, in matters of description is for the jury to determine. *Walton v. Potter*, 162.
- Sufficiency of, is a question for the jury. *Bickford v. Skewes*, 290.

when its cost is three or four times as great as the common article, is strong evidence of utility. *Re Downton's Patent*, 52.

Presumption as to. Fact of invention, when known, not getting into general use is a presumption against its utility. *Re Sinister's Patent*, 510.

Want of. Proof is not admissible under a plea denying that the invention is a new manufacture. *Walton v. Bateman*, 418.

USE.

If apparatus can be used beneficially in its simplest form, it is no objection that great improvements may have been made. *Neilson v. Harford*, 190.

The "public use" and exercise of an invention, which prevents it from being considered novel, is a use in public such as comes to the knowledge of others than the inventor, as contradistinguished from the use of it by himself in private; and does not mean a use by the public generally. *Carpenter v. Smith*, 889.

Public use. Manufacture and sale without secrecy by a workman, *held* a public use and exercise of the invention. *Carpenter v. Smith*, 889.

Public use. The use of a contrivance in such a situation that the public might see it, *held* a public use and exercise of the invention. *Carpenter v. Smith*, 889.

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